June 8, 2009

Office of Highway Policy Information
Federal Highway Administration
400 Seventh Street, S.W.
Washington, D.C. 20590
Attention: HPPI-20, Room 3306

RE: Delaware HPMS 2008

Dear Sir/Madam:

We are submitting herewith the 2008 HPMS Data in accordance with the reporting requirements.

Area and Population

The 2008 HPMS information reflects the 2000-Census Urban Boundaries. The Land area and Population are presented below:

Location	Area (Square Miles)	2008 Population
Middletown, DE	3.5	6,757
Dover, DE	58.6	73,057
Georgetown, DE	3.6	8,527
Lewes, DE	17.3	18,354
Long Neck, DE	11.8	9,939
Milford, DE - Kent	5.5	5,804
Milford, DE - Sussex	6.3	8,681
Ocean View, DE	10.4	9,860
Philadelphia, PA--NJ--DE--MD	188.2	489,798
Salisbury, MD--DE	0.6	1,262
Seaford, DE	15.6	23,457
Smyrna, DE - Kent	6.0	15,875
Smyrna, DE - New Castle	1.1	71
Rural	1,625.50	204,510
Total Urban	**328.50**	671,443
Total Rural	**1,625.50**	204,510
Total State	**1954**	**875,953**

The Land Area was calculated in accordance with HPMS guidelines. This year's calculations match the 2000 Census measurements of Delaware's total land area of 1954 square miles.

Based on the 2000 Census data, the Delaware Population Consortium provided the following population data and forecasts for each county of the State.

County	Area (Square Miles)	Population			
		2000 Census	2006	2007	2008
New Castle	427	500,265	525,578	529,590	532,057
Kent	589	126,697	147,587	150,516	155,299
Sussex	938	156,638	180,282	183,798	188,597
Total State	**1954**	**783,600**	**853,447**	**863,904**	**875,953**

2008 Delaware Certification Public Mileage

On May 1, 2009, Delaware reported 2008 Certified Public Miles to the FHWA. There were six thousand two hundred and eighty-one (6,281.25) miles of public roadways in Delaware.

The following table shows the comparison of 2008 and 2007 mileage by the type of roadway by jurisdiction. There was a total increase of 38.60 miles as shown below.

2007 - 2008 Mileage Table			
Type	**2007**	**2008**	**Change**
Road Inventory	3898.22	3897.55	-0.67
Suburban	1,416.76	1437.33	20.57
Municipal	769.22	780.8	11.58
DOD	41.00	41.00	
ACE	69.99	69.99	
Delaware Parks & Recreation	36.04	43.16	7.12
U.S. Fish and Wildlife Service	11.42	11.42	
Total	**6,242.65**	**6,281.25**	**38.60**

2008 Road Inventory Mileage

A small segment of 0.16 miles of rural local road was added.

More than 55.10% of the all roads under DelDOT jurisdiction in Delaware are local roads. All of these roads were originally county roads and moved under our jurisdiction when Department of Highways was first established. Some of these roads are dead end roads with fewer than 10 residential dwellings have very limited public use. For this reason DelDOT holds public hearings when a road of this type is being considered for vacation. If the road is vacated it then becomes a private road. This saves DelDOT the future costs of maintaining this road. During 2008 DelDOT transferred 0.78 miles of functionally classified local roads from public to private. As a result, the above mentioned changes account for a 0.62 reduction in the total mileage.

In the 2008 HPMS Universe we are reporting 373 miles of local roads with AADT below 100. According to the HPMS (Field Manual, Chapter 1) for Federal fund allocation the total Public Road Miles are used as part of the formula. With the current state of Delaware's finances, we may need to review the costs for keeping these roads vs. benefit that is derived.

In 2008 our office updated 13% of our Road Inventory data, which is approximately 515 miles or nearly 8% of the Delaware Certified Miles.

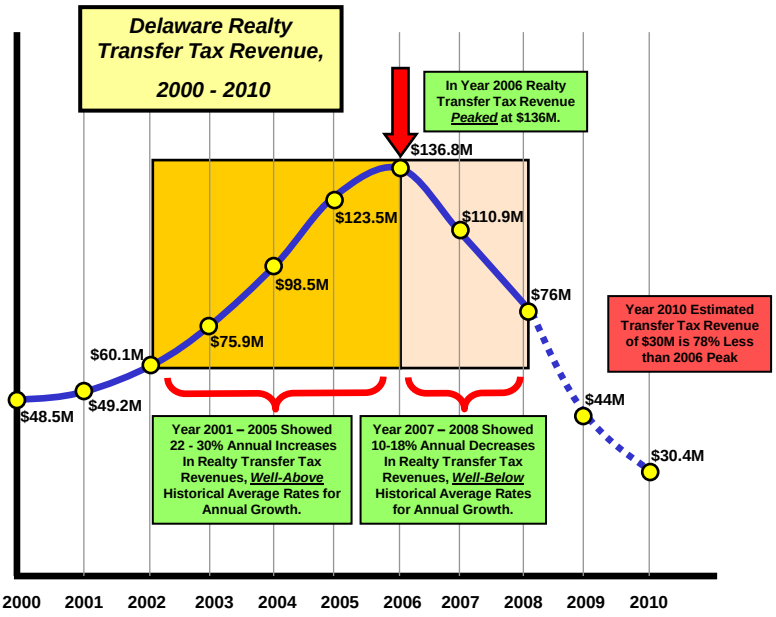
Suburban Street Mileage

There are 1437 miles of Suburban Street mileage which is also maintained by DelDOT and are funded through legislative Community Transportation Funds. Annually we review the mileage for these roads and include them in suburban street inventory.

There was an increase of 20.57 miles in the Suburban Street Mileage for 2008. This mileage is grouped by county, rural and urban areas. It is also grouped by the number of lanes and by Direction (1-way, 2-way).

Realty Transfer Tax Gross State Collections

Delaware has a Realty Transfer Tax (which is 3% of the sale price.) The buyer and the seller pay 1.5% each**.** Depending on the location of property, the Realty Transfer Tax is split between the state and the municipality**,** or the state and the county.



Source: Delaware Economic Financial Advisory Committee, May 2009 Report.

One of the major sources of revenue for the State of Delaware, its three counties, and its municipalities is the property transfer tax. As the above chart shows, the upward trend has been reversing since 2006.

The Delaware Economic and Financial Advisory Committee (DEFAC) is the group tasked with tracking revenue projections from the various sources of taxes, fees, and other payments to the State. The DEFAC data for the current fiscal year 2009 are located at: http://finance.delaware.gov/publications/DEFAC.shtml

A comparison of transfer tax revenue projections made in May of 2008 with those produced in May of 2009 indicates the following:

	FY 2008	**FY 2009**	**FY 2010**
May 2008 DEFAC Estimate	$99M	$93.1M	$95.3M
May 2009 DEFAC Estimate	$76M	$44M	$30.4M
% Change	***-23%***	***-53%***	***-68%***

The table above indicates that the May 2008 DEFAC estimate for transfer tax revenues for the period FY 2008 – FY 2010 were anticipated to be less than the peak transfer tax income of $136M received in FY 2006 but were relatively flat in terms of increases and decreases, with projected revenues in the mid $90M range. However, the May 2009 DEFAC estimates demonstrate a drop of 23% in actual FY 2008 transfer tax revenues as well as continuing significant decreases in the projected transfer tax source for FY 2009 and FY 2010.

The sources for the trends in transfer tax revenue are many, and include the subprime mortgage issues affecting many areas around the country. As a result, Delaware municipalities, as everywhere, are also facing a decline in the value of residential houses.

When purchasing residential property, buyers often consider the neighborhood and their commuting times to work; others are more concerned about the state they live in. To evaluate and compare the existing residential conditions by state, Dynamic Maps of Nonprime Mortgage is a good source.

Federal Reserve historical data shows that easy access to credit provided by banks has contributed to the current economic crisis.

Municipal Street Aid

There are 57 municipalities in Delaware. The increasing population and annexations of the adjoining lands by municipalities accounted for the growth trend. The Municipal Street-Aid Fund is used for cash distribution to municipalities based on road mileage and population. As reported herein, there was an increase of 11.57 miles of municipal street mileage in 2008.

DelDOT maintains and updates the road inventory mileage for all municipalities. In the HPMS Universe showing the county, rural and urban areas, the Municipal street mileage by number of lanes as well as by Direction (1-way, 2-way) is presented. More than 99% of this mileage is local.

The State Legislature appropriates a portion of Delaware's Transportation Trust Fund under the Capital Improvement Program to qualifying municipalities. No portion of this program involves Federal Funding. The money is used for the maintenance of city maintained streets as stipulated in Title 30, Chapter 51, Subchapter III of the Delaware Code.

The distribution is based on 2 factors:

1. Population: As certified by the U.S. Bureau of Census, Delaware Population Consortium, or a prescribed enumeration with population accounting for 40 % in the distribution.

2. Mileage: As verified by the Data Collection Unit, the mileage carries a weight of 60% in the distribution.

In FY 2008-2009, the funding was $6 million, which reflected an increase of $0.5 million from the previous year.

The municipalities provide updated data on an annual basis. Verification of new mileage is conducted by the Data Collection Unit. Each year this mileage is completed and verified prior to June 30th. After verifying the required data, the calculation to determine funding is distributed

to each municipality and forwarded to the State Treasurer's Office for disbursement of the state fund allocation.

A "Municipal Officials" database is maintained and continually updated utilizing various resources. It also requires the constant monitoring of Municipal Elections as they occur throughout the year.

Historical data is available on the DelDOT website. The FY 2009-2010 Program will be posted after July 1, 2009. Also, a complete guideline for the Municipal Street Aid Funding may be found on the State Auditor's web page:
http://auditor.delaware.gov/information/publications/MSA_Guidelines_032006.pdf.

Contact Information:

D. Steven (Steve) Smith
MSA Program Compliance Coordinator
Planning/Mapping Section
Ph. (302) 760-2456
Fax: (302) 739-6371
steven.smith@state.de.us

Electronic Red Light Safety Program (ERLSP)

Based on positive safety-driven outcomes reported in the February 2009 ERLSP report to the Bond Bill Committee of the 144th Delaware General Assembly, over 270,000 red light running violations have been recorded at 20 intersections throughout the state since the inception of the program. Approximately 41,000 violations occurred in calendar year 2008 alone. Angle collisions due to red light running have been reduced at 17 out of 20 intersections as a result of the ERLSP; 13 out of 20 had fewer rear-end crashes as well. Total crashes have been reduced by 15 percent since 2005, comparing crash data prior to the implementation of the ERLSP to crash data through calendar year 2008.

The ERLSP technology currently in use is owned and maintained by Nestor Traffic Systems (NTS). During calendar year 2008, the Department successfully negotiated an extended contract which lowered the operating cost of the ERLSP by approximately 15%.

Calendar year 2008 was the first full year of assessing the violation fine of $112.50. As a result of legislation passed by the 143rd General Assembly, a $37.50 Transportation Trust Fund surcharge was added to the $75 statutory fine, and also increased Court costs for those found responsible by adding a $10.00 surcharge for Court security and a $1.00 surcharge for system support of the DelJIS organization. The cost and dividend structures paid to the municipalities, and employer costs paid to the Delaware State Police, remain the same as they were in the Pilot portion of the Program.

The Delaware Department of Transportation identified 10 intersections in which additional ERLSP technology will be deployed. Design is completed for all intersections and installation will be completed sometime in the fall of 2009.

The Department will be implementing a collections system to capture outstanding fines for the program, starting in July 2009. There are approximately 13,000 outstanding violations totaling $1.3 million in uncollected fines. This effort should recoup approximately $150,000 in additional revenue each year.

Electronic Red Light Safety Program

The ERLSP Contact Information:
Brett Taylor, Financial & Legislative Policy Advisor
DelDOT
Office of the Secretary
800 Bay Road
Dover DE 19903
Brett.Taylor@state.de.us
(302) 760-2492

Department of Defense Mileage (DOD)

During 2008 there was no change in mileage under the jurisdiction of DOD; we are reporting 41 miles for the year. This mileage exists inside Dover Air Force Base, and conforms to the guidelines of public road mileage. At the entrance of Dover Air Force Base, civilian employees and non-employees are required to pass through security clearance, show identification cards, and explain the purpose of their visit. Under the new Home Land Security guidelines, these procedures are very common in most state and federal office buildings.

Every few years, the U.S. Department of Defense consolidates Air Force Base operations; some bases are closed while others are consolidated. The closest international airports to Dover (Capitol of Delaware) are Philadelphia, PA, Baltimore, MD and Dulles, VA. The travel time to each of these airports is approximately two hours from Dover. Thus, Delaware will need a regional airport in the future. The joint use of civilian and Air Force flight operations may be more cost-effective.

The contact person for Dover Air force mileage, lanes, and AADT is:
Mr. Kennard, C. Barry, Acting Chief, Resources Flight
United States Air Force
Dover AFB, DE 19902
Phone: (302) 677-6200
carl.kennard@dover.af.mil

Army Corps Of Engineers Mileage

In 2004, Delaware added 69.99 miles of local dirt roads in the proximity of Chesapeake and Delaware Canal. These roads are presently being used by the public and comply with the guidelines of public road mileage. Delaware Congressman Michael N. Castle, and other state and local officials as well as the public, are interested in converting some of the adjacent lands to a state public park.

The State GIS Analyst, Sarah Burkett, in coordination with the Army Corps of Engineers' Chesapeake City Project Office, has used GIS technology to calculate the mileage or roads along the C&D Canal. The methodology included heads-up digitizing of roads using a 2002 high-resolution (1:2,400 scales) infrared orthophotography base with reference to 2005 satellite imagery and hard copy maps from the Atlas of Delaware produced by DelDOT. Total mileage of the roadways were calculated using GIS length calculation tools, resulting in 69.99 miles. The U.S. Army Corps of Engineers (ACE) was given hardcopy maps of the digitized roadway for review. DelDOT and ACE mutually agreed to use this calculation for state mileage reporting purposes.

Map displaying ACE Jurisdiction Roads identified using GIS technology.

The contact information of the official in the US Army Corps of Engineers, who reviewed the GIS data and mileage calculations, is:

James R. Tomlin, Jr.,
Resident Engineer
Chesapeake City Project Office
U.S. Army Corps **o**f Engineers
P.O. Box 77
Chesapeake City**,** Maryland 21915
TEL: 410-885-5621
E-mail: James.R.Tomlin@nap02.usace.army.mil

Mr. Tomlin has provided his approval of the calculated mileage.

Chesapeake and Delaware Canal Recreation Trail Project

The Chesapeake and Delaware Canal Recreation Trail project, led by Congressman Mike Castle, will transform over 26 miles of Army Corps service roads from Delaware City to Chesapeake City into a multi-purpose recreation trail with associated amenities and added security. Based on the information contained in the "2003-2008 Delaware Statewide Comprehensive Outdoor Recreation Plan (SCORP)", the project design has now been completed.

A working group was formed for the C & D Recreational Study to develop an appropriate vision into a multi-use trail stretching 26 miles along the C & D Canal in Delaware and Maryland. Several public workshops and surveys were conducted where residents of both states participated. The plan entails a continuous trail from Delaware City to Chesapeake City, and a link to other greenways, trails, and historic sites in the region.

After receiving input from the public, the 30 % plans were advanced into final design. The Final Environmental Assessment (EA) was completed in July 2008. Final construction plans, estimates, and specifications were completed for review in November 2008. The US Army Corps of Engineers is the project sponsor, and will advertise the project for construction after the long-range management plan is approved.

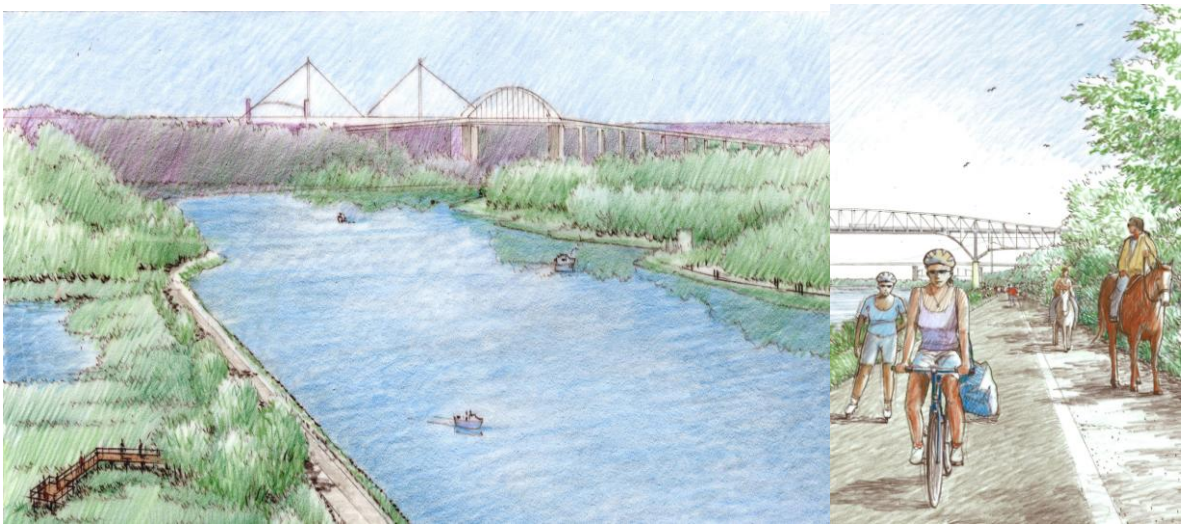
The estimated cost of the project is $10, 500, 000 with $978,734 spent on design.

The project will accomplish the following objectives.

1. To provide, enhance, and encourage recreational activities along the C & D Canal, particularly for the citizens of Delaware and Maryland.
2. To provide an opportunity to interconnect open space, greenways, trails, and historic sites that currently exist while encouraging future developments in the region.
3. To restore the natural habitat by planting a selection of native plants and by removing invasive species.

When the project is complete and opened to the public, it will be the first National Park in the "First State". The project may take up to 5 years to complete, but because of the ceaseless efforts by many people, including Vice-President Biden, and intergovernmental cooperation, it is expected that this landmark project could be completed sooner. Once completed, it will provide recreation and amusement to the people along the C & D Canal for the foreseeable future.

For project updates, please visit Rep. Castle's website at www.castle.house.gov. To view the "Trail Concept Plan," please visit www.nap.usace.army.mil/Projects/CD/index.htm.



OLIVIA KURTZ
SENIOR LEGISLATIVE ASSISTANT
CONGRESSMAN MICHAEL N. CASTLE (DE)
1233 LONGWORTH HOUSE OFFICE BUILDING
202/225-4165
202/225-2291 ~ FAX

Delaware Parks and Recreation

The Division of Parks and Recreation operates and maintains 16 state parks and related preserves and greenways throughout Delaware totaling more than 25,000 acres. The state's land protection programs, as well as the state's Greenways program, are administered by the Division. The Division is also responsible for providing recreational opportunities, educational and interpretive programs for the public. Other responsibilities include acquiring and developing recreational lands & facilities, providing for the protection of natural areas, and overseeing & planning for statewide recreational needs.

The inventory for the State Parks road system lists a total of 43.16 miles. The Division of Parks & Recreation is currently updating its road inventory database, which will be provided when completed.

For more information please go to http://www.destateparks.com

The contact information of the person in Delaware Parks & Recreation, who provided this information, is:

Robert Shaw
Management Analyst II
Division of Parks & Recreation
89 Kings Highway
Dover, DE 19901
Phone: (302) 739-9231
Fax: 302-739-7026

U.S. Fish and Wildlife Service

In 2006, we also added 11.42 miles under the jurisdiction of U. S. Fish and Wildlife. This includes Bombay Hook and Prime Hook, which become major attractions for bird watchers, especially during bird migration seasons.

Studies conducted by the National Wildlife Federation show that nearly 400,000 people spent more than $130 million on hunting, fishing and wildlife viewing in Delaware, which in turn, supported 2,255 jobs in the state.

U. S. Fish and Wildlife information was provided by the following:

Oscar Reed, Jr.
Deputy Refuge Manager
Bombay Hook NWR
(302)653-9345
Oscar_Reed@fws.gov

Bill J. Jones
Visitor Services Manager
Prime Hook National Wildlife Refuge
(302) 684-8419
Bill_J_Jones@fws.gov

ERROR MESSAGES 2008

- Error Messages 1: At Peak Capacity for more than 13 hours
  County 3(New Castle County) - Section ID: 000590001820

  Response: New Castle County Road 56 & Road 59 are a part of the Interstate route I-95, and this section is where all three Delaware Interstate routes I-95, I-295 and I-495 converge. This is a recurring traffic congestion problem. The condition remains for more than 13 hours daily over this very small section of 0.31 miles.

- Error Messages 2: VSF must be less than or equal to 1.20
  County 5 (Sussex) - Section ID 000240038130

  Response: Sussex County Road 24, which is also Delaware Route 24, is a Rural Major Collector with two lanes, AADT of 17,562 in 2008, K-Factor of 9, Directional Factor of 60 %, and a Section Length of 2.92 miles. This road serves Delaware's major summer Beach Resort area in the Rehoboth area and traffic back up is not uncommon during the entire summer season.

- Error Messages 3: Unusually high number of intersections (> 25 per mile)
  County 5 (Sussex County) - Section ID: 000500004520

  Response: Sussex County Road 50 is designated as Delaware Route 1. It has a sample length 0.52miles, and this sample is in the town of Bethany Beach. The number of intersections is correct

- Error Messages 4: Unusually high number of intersections (> 25 per mile)
  County 5 (Sussex County) - Section ID: 000760000220

  Response: Sussex County Road 76 and it has a sample length 0.22 miles. This sample is in the town of Delmar. The number of intersections is correct.

Standard Samples and Donut Sample Volume Group

We have reviewed and analyzed the HPMS sample requirements for the 2008 submission. Using the HPMS software on FHWA Internet UPAC site, our micro analysis on the Urban, Urbanized, Small Urban and Rural Area, indicates that there are at least 5% HPMS samples in excess of the requirement.

In the past, the traffic growth throughout the state created a shift in the High Volume Group. Furthermore, the opening of SR-1 toll road from Dover to I-95 has changed the travel patterns.

The current decline in economy has caused a significant impact in transportation unseen in Delaware since the creation of Delaware Highway Department almost 90 years ago. The Annual Vehicle Miles of Travel has decreased appreciably.

In New Castle County and Wilmington Urbanized Area (including a part of Philadelphia Area), the unemployment is above 10%. Employment in the banking sector has substantially diminished. General Motors and Chrysler plants, which operated in three shifts, are either closed or have very limited production. Port facilities are working at less than 50% of the capacity.

In the Dover Urban Area, Some of the major retail chain stores like Boscov's and Value City have filed bankruptcy. Bank of America relocated and off-shored their Credit Card Call

Centers that were situated in the Silver Lake and the Blue Hen Mall. In the past 5 years, 850 jobs were lost.

In Sussex County- Seaford Small Urban Area, DuPont Nylon plant has shifted their manufacturing unit, which has resulted a relocation of more than 85 % of their employment.

Our permanent traffic counters are showing significant decline in AADT across the entire state.

Many of the samples recommended for deletion do not meet the logical section length (HPMS Manual Chapter VII) requirements. Also, the difference between required and current samples is more than 3.

For the above reason, along with other significant sample selection criteria, we have deleted 30 samples from different Volume Groups evenly distributed throughout the sate. .

The deletion of these samples will not affect the existing or forecast traffic analysis. Delaware provides AADT for the entire universe.

The 2008 Universe comprises 6,281 miles of roadways in Delaware. We have deleted 30 standard samples and added 7 new samples in the lower volume group. There was a net decrease of 23 Standard samples. Thirty samples were deleted, because they were all either very small sections under 0.40 miles in section length, which did not meet the adequacy guideline, or were more than required. We added 30 donut samples.

The annual changes in Standard and Donut Samples are presented below.

Change in Standard & Donut Samples

Year	Samples	Change	Donut Samples	Change
2000	587		89	
2001	621	34	109	20
2002	628	7	118	9
2003	643	15	175	57
2004	733	90	212	37
2005	658	(75)	253	41
2006	643	(15)	255	2
2007	638	(5)	258	3
2008	615	(23)	288	30

The AADT, as reported, is for the entire universe of the state, including roads and streets classified under the Local category. Field counts are made for all state-maintained roads. For Suburban Street mileage and municipally maintained roads, which are grouped together, a

sampling procedure is used along with engineering judgment, to determine the traffic volumes. The function of Donut Samples is to estimate DVMT in Rural and Small Urban Areas, Urban and Rural Minor Arterials, Urban Collectors and Rural Major Collectors. The entire universe data are provided on Summary Sheet A, (Daily Travel Information in Thousands).

2008 Sample Status

Delaware now has more samples than the minimum HPMS sample requirement. For a small state with only 6,281 certified miles, there is a standard sample section for nearly every ten miles. Besides the HPMS needs, samples are included where major traffic patterns may change due to increased tolls on Interstate roads and SR-1 tolled freeways. As the AADT in 2008 dropped from the previous year, a sample shift to the lower volume groups was apparent. As in the past, the sample sections will be reviewed and updated every year.

HPMS Roughness Reporting

Roughness measurements were collected in the State of Delaware in accordance with Appendix E in the HPMS Field Manual dated 2005. Data collection was required for some sample segments and recommended for others. Because of time constraints, data were not collected for the "recommended" segments, but they were collected for the entire length of "required" segments. Roughness measurements were conducted on Rural Principal Arterials (HPMS Code 2), Rural Minor Arterials (HPMS Code 6), Urban Principal Arterials – Interstate (HPMS Code 11), Urban Principal Arterials – Freeways & Expressways (HPMS Code 12), and Urban Principal Arterials (HPMS Code 14).

DelDOT does not have equipment to measure IRI and must depend on an outside vendor. Infrastructure Management Services (IMS), a contractor retained by DelDOT, used a Digital Road Surface Tester (RST) equipped with a laser bar measuring device for the calculation of the IRI. In addition to the laser measurement system, the RST is equipped with a differentially corrected global positioning system to ensure that the correct locations were measured for HPMS reporting. For Quality Control purposes, IMS captured a video record of the test areas while they were collecting HPMS data.

Data collection and IRI calculation was performed by Infrastructure Management Services from Rolling Meadows, Illinois. Data for this submission was collected from January 23, 2008 – February 4, 2008. Temperatures during the test time were above freezing when data collection was taking place. Contact information for IMS is:

IMS Infrastructure Management Services
1895-D Rohlwing Road,
Rolling Meadows, Il 60008
Phone (847) 506-1500
Fax: (847) 255-2938

All data were collected in the direction of increasing stations in DelDOT's road database system, which is south to north and west to east. When multilane facilities were tested, the outermost lane was tested. Bridges and railroads were excluded from the data reported. Both wheelpaths were measured and the IRI was calculated in accordance to AASHTO PP 37-04.

Using the HPMS Sample Length and Expansion Factor, it was found that there are 162.93 miles of roads with Year of Surface Improvement (HPMS item -53) as 2008. Engineering judgment was used to code the IRI and PSR values for this 2008 HPMS submission in conformance with the requirement stipulated in the HPMS manual.

Any questions concerning the collection of the data should be directed to:

James Pappas
Department of Transportation
P.O. Box 778
Dover, Delaware 19903
(302) 760-2400

Present Serviceability Rating (PSR)

The Pavement Management Section collects the PSR data on an annual basis.

1. The Overall Pavement Condition (OPC), as determined by the Pavement Management Section, is the source of the PSR data. A consultant is retained to perform the task.
2. The Pavement Management Section has collected data for all state-maintained roads in 2002, 2003, 2004, 2006, 2007 and 2008.
3. In 2005, the data was collected for all state-maintained roads, except for suburban streets.
4. The severity and the extent of distress of each roadway segment are evaluated by visual inspection. The consultant collecting the ratings retains an academic expert to provide the QA/QC report reviewed.

The engineer in charge of PSR data is:

Jennifer Pinkerton
Phone: 302 760 2071
FAX: 302 739 5270
E-mail: jennifer.pinkerton@state.de.us

The HPMS Console

GeoDecisions, a consultant, was hired by DelDOT in 2006 to facilitate the gathering of all data required for the HPMS. The HPMS console was developed as a component of the

Department's Information Network for the Online Resource Mapping (INFORM) project. It can be used to manage, monitor, report, maintain, and generate various automated reports. Only a few persons submitting the HPMS data are at present using HPMS console. There continues to be problems with the application of the console which are being rectified at present. It is expected that the HPMS console will be useful in preparing the HPMS reports for 2009. We plan to have a meeting after the 2008 submission and get input from the users to see if more modifications are required.

FHWA REVIEW and Response to HPMS Data in 2007

Last year, DelDOT submitted HPMS data conforming to the reporting requirements. On August 18, 2008, Tashia Clemons & Robert Rozycki of the FHWA Division Office performed a HPMS Field Audit.

DelDOT was asked to improve the quality and the collection of data especially on pavement related items. Other than that, the submission was satisfactory.

The following comment was received by e-mail from Robert Rozycki on August 19, 2008: "DE appears to be doing good work!"

PSR and IRI values were updated using engineering judgment for the road sections which were improved in 2008.

A number of steps were taken to work toward achieving that goal in this report

Changes Planned for 2009 HPMS

During 2008, Delaware like other states is facing a slow down in the economy. With the closing of various manufacturing, banking, and other businesses, we plan to reschedule counts to reflect the changing traffic conditions. Traffic Pattern Group factors for some locations may need to be reevaluated. We will recheck our procedures for developing the seasonal group factors, directional splits and peak hour factors, especially along summer routes.

With the help of Office of information Technology, we are developing information on trucks showing, Peak Hour Trucks for Single and Combination units.

At present, the previous HPMS software Version 6 dated April 19, 2004 is still being used. We are also working with GeoDecisions on a new GIS based program called HPMS Console. All of these will be implemented in the 2009 HPMS submittal. The contact information is:

GeoDecisions
Plaza 273, Suite 207
Christiana, DE 19702
Phone: 302-731-7531

LRS FOR GIS PRODUCTS

We have coded the LRS data for this 2008 HPMS submission. The road centerline file is in an ESRI shapefile format with associated metadata. The attribute data for the centerline includes the LRS identification field and DelDOT's linear referencing fields including roadway ID, beginning mile point and ending mile point.

The contact information for the consultant in charge of LRS is as follows:

Kumar Sanjay
GIS Consultant
DelDOT
Phone: 302-760-2648
Sanjay.Kumar@state.de.us

SITE-SPECIFIC TRAVEL ACTIVITY/VEHICLE CLASSIFICATION DATA

In October 2008, DelDOT developed the ability to review all available ATR data prior to submission to FHWA and Chaparral Systems. This data was evaluated for efficiency, completeness and expected travel patterns for specific calendar events occurring throughout the State. During 2008, the department worked closely with the Chaparral Systems, using their TRADAS HPMS module to extract traffic related data, which was used to support DelDOT's FHWA data submission and subsequent HPMS data extraction

As required, we continue to send the monthly ATR counts to the Travel Monitoring and Surveys unit of the FHWA via e-mail: atrdata@fhwa.dot.gov after internal Quality Assurance review.

There were 623 short-term counts in 2008. This represents approximately 19% of the 3300 roadway sections in the network. During 2008, 80 of our 81 ATR's were operational, which included twenty-two (23) Weigh-in-Motion (WIM) stations. During 2007, we calibrated all 23 WIM sites. Two additional ATRs (8026 and 8054) were brought on line. Three more sites are due in 2009.

As a result of DE4/DE896 SB (ATR 8020) rehabilitation, and loop replacement, higher accuracy of associated traffic data was verified resulting in a substantial shift in data. That ATR data was excluded from annual analysis so as not to bias the overall statewide traffic shift.

The I-95 (ATR 8003 (WIM)) site remained non-operational. A decision was made to reposition this ATR further north in the recently widened the I-95 corridor in an effort to reduce the impact of slow traffic in peak demand (> 30th Hour). The installation of this ATR is expected in 3rd quarter CY 2009 after rehabilitation of the roadway segment in which it is to be installed.

Traffic pattern data for this site was derived from data analysis across adjoining segment and regional ATR's

K & D Factors were developed by Chaparral Systems Corporation, our TRADAS vendor, using its FHWA approved HPMS module. DelDOT is in the process of implementing a system to monitor real-time traffic data, to include site status, via the ATRs. This system will allow our field technicians to respond immediately to ATR communication, data collection and equipment anomalies.

For further information, contact:

Liam Morris, Engineering, Planning and Survey Technician
302-760-228
liam.morris@state.de.us

Travel and Demographic Data

The 2008 population data was obtained from the October 2008 Population Consortium. The Delaware Land Area remains at 1954 square miles, conforming to the 2000 U.S. Census.

Population: The yearly change in population by county is tabulated below:

County	Population by Year		
	2007	2008	% Change
New Castle	528,223	532,057	0.73%
Kent	152,249	155,299	2.00%
Sussex	184,301	188,597	2.33%
Total State	**864,773**	**875,953**	**1.29%**

The growth of population was only 0.73% in New Castle County. There are several reasons for the slight growth, which include major bank mergers, transfer of credit card operations to other states, and outsourcing work assignments to other countries. The City of Wilmington, which is the financial hub of banking operations in Delaware, has a wage tax. There was a general shift of jobs to lower tax area states, which offer other incentive packages. In comparison to the other two counties of Delaware, the property prices are higher in New Castle County. Early-retirement opportunity, buyout offers, and elimination of salaried positions in automobile assembly plants created a migration of some labor force from Delaware. The General Motors assembly plant near Elsmere went from three shifts to only one by the end of 2008 and the Daimler-Chrysler assembly plants in Newark closed in November 2008 after experiencing shift reductions in prior months. Despite these factors, there was still a slight growth of population in New Castle County.

Kent County had an increase in population of 2.00% for the year. The main reason for the increase can be attributed to affordable housing and the ease of travel after the completion of the SR-1 freeway in 2004. The state capitol is located in Kent County.

Sussex County had the largest increase, a 2.33% growth in population. There was a large population migration from other states into Sussex County. Despite the national recession, the cost of living, affordable housing, open space, environmental benefits and convenient public transportation are some of the major reasons for this increase in population. As the demographic changes in the Census indicate, many of these new comers are retirees and senior citizens. That was one more factor for an unusual booming residential demand in Delaware during the years 2000-2005.

In 2008, like most other states, Delaware is facing a high foreclosure rate. With a decline in the housing industry, there is a problem for the new immigrants who were employed in the construction. Low salaries and sporadic employment in this sector have also contributed to the high foreclosure rate within the state.

Daily Vehicle Miles of Travel:

The following table shows DVMT in Delaware by county:

Daily Vehicle Miles Travel (000)			
County	**Year**		**Annual Change**
	2007	2008	
New Castle County	15,190	14,407	-5.15%
Kent County	4,655	4,388	-5.74%
Sussex County	6,054	5,751	-5.00%
State of Delaware	25,899	24,546	-5.22%

There are several noteworthy events that appear to have had an effect on decreasing the HPMS traffic count universe used to generate the overall HPMS VMT estimate for 2008. Delaware's overall real estate market for 2008 followed and was consistent with regional and national trends, indicating a "slow down" of retail sales for both new and existing homes. In Delaware, this trend affected all three counties but was particularly evident in the eastern part of Sussex County noted for its resort seashore recreational attractions. Over the past ten years, according to the Delaware Population Consortium, about 40% of the total dwelling units constructed in eastern Sussex County were "second homes" used as vacation homes or partial-year residences. Many of these homes were also used as weekly or monthly rental units for all or part of the summer months. For 2008, the overall "downturn" in the real estate market was demonstrated by continued reductions in real estate transfer taxes (RTT) as reported in major newspapers. The reduction is real estate transfer tax revenue is projected to continue as the 2008 revenue to the state of $76.0 million is only forecast to be $45.0 million next year. There was also a general slowdown in the retail sector as evidenced with the closing of the Value City chain

and the temporary closing of the Boscov's chain (with three stores in the state). The overall economic slowdown for 2008 also appears to have been, at least partially, the result of the relatively high price of gasoline as compared with 2007, which peaked in July 2008 at over $4.00 per gallon, and appears to partially explain reductions in AADT and VMT throughout the state. (Source: Michael DuRoss, Planning Supervisor, DelDOT)

National Highway System (NHS):
There were no changes to the NHS for 2008. It remains 338.17 miles.

Strategic Highway Network (STRAHNET):
The STRAHNET mileage has not changed for 2008. It remains 146.90 miles, including 40.61 miles in the Interstate Highway System.

Intermodal Connector:
Delaware has 7.00 miles of Intermodal Connector mileage and has not changed in 2008.

Delaware Toll Routes
There was no change in the toll road mileage of 48.40 miles in Delaware.

Last toll rate adjustments were made effective October 1, 2007:

The Delaware Department of Transportation (DelDOT) is implementing a series of changes to the toll rate structure on the Delaware Turnpike (I-95 Newark Toll Plaza) and Route 1. The below toll rate increases are part of a package of other fee increases, including several motor vehicle fee increases that will help provide the state with the revenues to move forward with many transportation projects and services that have been planned for years.

Delaware Turnpike (I-95) Newark Toll Plaza:
- Tolls for all classes of vehicles on I-95 increased by $1.
- The nighttime commercial vehicle E-ZPass discount was eliminated.

Rt. 1 Biddle's Corner Toll Plaza (south of Canal) and Dover Toll Plaza:
- Passenger vehicle tolls on Rt. 1 on weekends (7 p.m. Fridays to 11 p.m. Sundays) increased by $1.
- Passenger vehicle toll rates on weekdays remained unchanged.
- Commercial vehicle tolls increased by $1 on weekdays, and by $2 on weekends (7 p.m. Fridays to 11 p.m. Sundays).

Boyd's Corner (exit 142) and Denney's Road (exit 104) toll ramps:
- Passenger vehicle toll remained the same, at 50 cents
- New commercial vehicle rates are 50 cents per axle.

South Smyrna (exit 114) toll ramp:
- Passenger vehicle toll remained the same, at 25 cents.
- New commercial vehicle rates are 25 cents per axle.

Route 1, Other

- The Frequent Traveler 50 percent discount for passenger vehicles making 30 trips in 30 days remains unchanged.
- The commercial vehicle E-ZPass discount was reduced from a discounted rate of 50 percent to a new discounted rate of 25 percent per transaction.
- The 15 percent standard E-ZPass discount is eliminated at all locations.
- The High Occupancy Vehicle (HOV) discount is eliminated.

MORE INFORMATION AT:
www.deldot.gov, under Hot Topics
E-ZPass Web site at www.ezpassde.com
1-888-EZPassDE (1-888-397-2773) 24/7
DelDOT Public Relations, 302-760-2080.

E-mail DelDOT Public Relations at dot-public-relations@state.de.us

Traffic Volatility:

Unusual traffic conditions exist in many roadway sections of lower functional classifications. From field observations, we believe this is due to recreational traffic in the summer as well as peak traffic in urbanized areas (Dover and Wilmington). There is a tendency by local residents, familiar with area roads, to use short cuts to bypass the congested mainline traffic.

Lane Width:

The lane width is based on road markings. Much of Delaware Road Inventory data are over three years old. As we continue to update our Inventory files, the necessary changes will take place.

Road Inventory

We have implemented electronic inventory data collection software. This will allow us to implement our data collection plan and provide updates to the Federal funded roadways on a three to five year cycle.

The entire DelDOT Road Inventory unit is overseen by:
Kevin Gustafson
Road Inventory Supervisor
302-760-2142
Kevin.Gustafson@state.de.us

Unpaved Roads

There were 88.17 miles of unpaved roads in 2008. DelDOT has a special unpaved roads schedule program, and funds are allocated every few years. In 2008 there were no roads under the jurisdiction of DelDOT which were classified as unpaved. Reporting Year in which the roads were first added to the Delaware Certified Mileage, Jurisdiction, and Rural-Urban Mileage for the unpaved is shown in the table below.

2007 Unpaved Road Mileage by Year, Jurisdiction & Rural -Urban

Year	Jurisdiction	Rural	Urban
2005	Army Corps Of Engineers Mileage	69.99	
2006	Delaware Parks & Recreation	6.54	1.55
2006	U.S. Fish and Wildlife Service	10.09	
	Total	86.62	1.55

Total Unpaved Miles in Delaware 88.17 miles

Highway Surveillance Systems (item's 38 – 46):

All of the information provided to us for the 2008 HPMS submittal came from data collected by the Transportation Management Center (TMC). Data collected for items 40 and 42 are also maintained by the Transportation Management Center (TMC) in an ESRI SDE database.

Changes made for 2008 HPMS:

Mr. David Maerten (DelDOT Traffic) preformed all changes that were entered into ESRI SDE Spatial database. Mr. Darin Dell (DelDOT OIT) compiled data, ran queries on the data and entered changes into the spreadsheet that was provided to Mr. Subhash Bhai. Additional comments were received from The Chief Traffic Engineer, Mr. Donald Weber.

Item 38 – Collection of Real-time traffic data to monitor traffic flow:

If this pertains explicitly to microwave detection we have only a few test locations installed at current time. System loops have been installed at a number of intersections statewide and data can be pulled from them. As an example we do use the signal loops in the resort area to pull real time volumes on beach routes. We did bring the remainder of the approximately 80 count stations online last year and can monitor volume and speed near real time.

Item 39 – Metered entrance ramps:

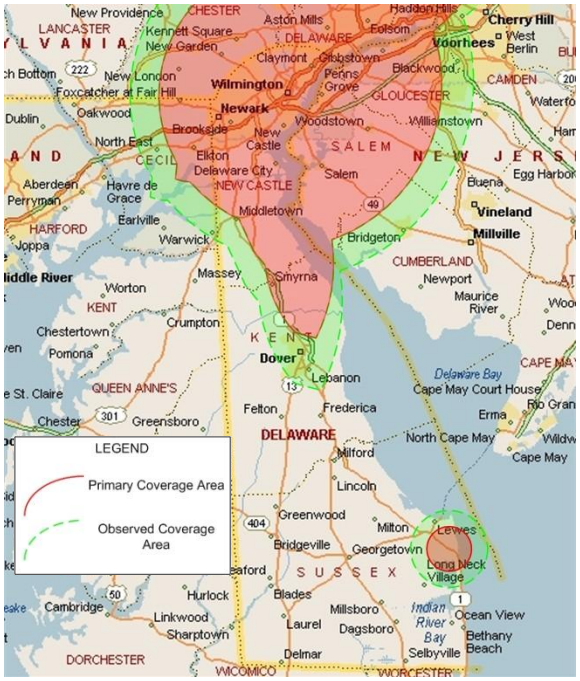
None for the state

Item 40 – Variable message signs:

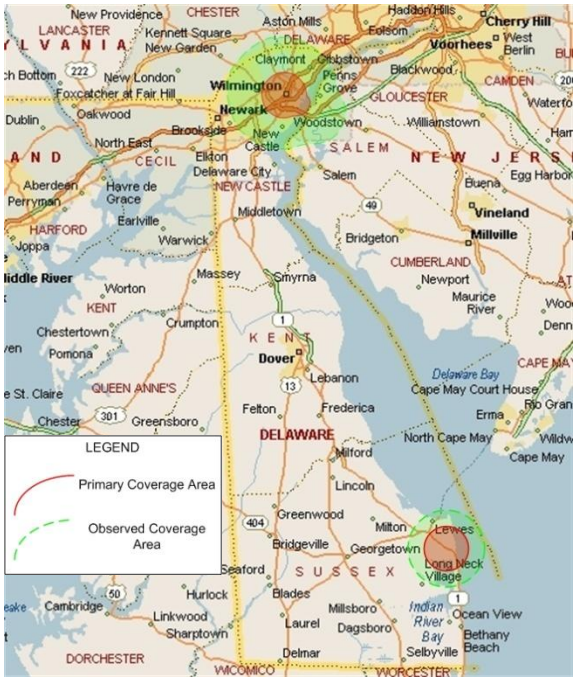
Reported 9 signs in 2007 and no signs were added in 2008. Obtained from Spatial database.

Item 41 – Highway Advisory Radio:

Reported in 2007, Route 1 only form NC County to Dover also Route 1 form 5 Points Lewis to north of Bethany. Radio is fulltime operation but because of FCC requirements the Wilmington transmitter operates with reduced power at night. A repeater exists in Rehoboth and one has also been added in Dover (near the signal sign shop). Several more are planned to be constructed in FY 09 and FY 10 depending on funding. Report no changes for 2008.



WTMC Daytime Coverage



WTMC Nighttime Coverage

Item 42 – Surveillance Cameras:

Reported 85 cameras for 2007. Twenty-one cameras were added in 2008 making the Total 106 cameras for 2008. Obtained from Spatial database.
Mr. Sanjay Kumar, queries roadway segments within a half-mile of cameras to generate report.

Item 43 – Incident Detection Tech. Algorithms:

None for the state

Item 44 – Covered by free Cell Phone (#77):

Statewide 24/7 coverage by DSP for 911 and #77 by DelDOT.

Item 45 – Public Service Patrol or Towing:

No fulltime Public Service Patrol or Towing for the state.

We operate a MAP program on I-95 during peak hours, holidays and weekends. In addition we offer a STO program along primary beach routes (both north south and east west) during the summer.

Item 46 – Hardware needed to provide In-vehicle signing info to equipped vehicles:

None for the state

Future improvements for 2009:

We expect to add several cameras, bring additional signal locations under central signal system control and possibly to complete a communications backbone from Dover to Milford (possibly with microwave).

Future recommendations and suggestion as to how we can improve the procedure for future submissions:

The HPMS Console needs to be automated for all items where we have highway surveillance.

Below is the contact information for the DelDOT employee in charge of compiling the Highway Surveillance System data. Information is furnished below:

Darin Dell, CADD/GIS Technologist
Delaware Dept. of Transportation – T615
Office of Information Technology
800 Bay Road, P.O. Box 778
Dover, DE 19903

Tel. (302) 760-2632
Fax (302) 760-2632
Email: Darin.Dell@state.de.us

Item 50 Surface/Pavement Type

- Item 50 Surface/Pavement Type: Visual Pavement Management System Software – Surface type is updated by consultant performing condition ratings for the state-maintained inventory on an annual basis (suburban inventory may skip years), Pavement Management maintains this database and surface changes are submitted to Planning to update the road inventory. Surface type data is also updated when construction projects are completed and form is submitted to Pavement Management, which updates the surface type manually.

- Item 53 – Year of Surface Improvement: Visual Pavement Management System Software – Improvement data is updated when construction or maintenance projects are completed and a form is submitted to Pavement Management, which updates the construction history of the road segment affected.

Jennifer Pinkerton, P.E.
Delaware Department of Transportation
Maintenance and Operations, Pavement Management
Dover DE 19901
Tel. (302) 760-2071
Fax (302) 739-5270
Email: Jennifer.Pinkerton@state.de.us

- Item 51 – SN or D
  For the structural number determination, Materials & Research has an internal database that is used to determine material compositions and pavement thicknesses. From that database, structural numbers are determined.

James Pappas
Chief Materials & Research Engineer
Transportation Solution & Engineering Support
Material & Research Section
Tel. (302) 760-2379
Email: James.Pappas@state.de.us

- Item 62 — Widening Feasibility
  In 2008 all the 615 HPMS Samples were evaluated for widening feasibility by visual examination of the latest (2007) aerial photography in ArcGIS. Staff created 10-foot lane "buffers" that we superimposed on the road network to assist in visually estimating widening feasibility of the sample road segments. This system enabled the Department to tell how many 10-foot lanes could reasonably be added to either side of the segments or how close any permanent structures were to the segment.

  Item 62 was updated with 2008 HPMS samples and roads with major improvements were also updated. Staff will be developing a tracking system in 2009 (working with District offices) to track any new road widening projects and adjust HPMS Item 62 accordingly.

Bruce Allen
Supervisor
DelDOT Planning Division
Tel. 302-760-2135
Email: bruce.allen@state.de.us

Pavement Geometric

- Items 63-68 – Curves by Class: Falcon/DMS: Actual Construction Plan Curvature
- Items 72-77 – Grades by Class: Falcon/DMS: Actual Construction Plan Profiles

HPMS software was used to evaluate the 2008 Samples Adequacy Requirements. Seven (7) new samples were added in Kent & New Castle County. Pavement geometry was reported accordingly. Random checks on existing data was also corroborated

The above information was obtained from DelDOT's archive plan database. Users should have proficiency of plan reading, station to milepost conversion and archive file search criteria.

Leo E. Gracie
Delaware Department of Transportation
Quality Section
Dover DE 19901
Tel. (302) 760-2347
Fax (302) 739-6360
Email: Leo.Gracie@state.de.us

Traffic/Capacity

The Traffic Studies Section was responsible for updating the following 10 items for all the roadway segments (643 segments) in New Castle, Kent, and Sussex Counties for the 2008 HPMS submission:

- 61 Peak Parking
- 78 Percent Passing Sight Distance
- 80 Speed Limit
- 88 Left Turning Lanes
- 89 Right Turning Lanes
- 90 Prevailing Type of Signalization
- 91 Typical Peak Percent Green Time
- 92 Number of At-Grade Intersections – Signals
- 93 Number of At-Grade Intersections – Stop Signs
- 94 Number of At-Grade Intersections – Other or No Controls

The resources we used to update these items included DelDOT's Digital Video Log, aerial photographs from GeoMedia and various internet maps, and existing signal and regulatory sign resolutions found in DocStar (a document database of resolutions and agreements). With these resources the inventory segments were viewed (via the aerials and video log) to check for passing sight distance, left and right turning lanes, and number/type of intersections. The current speed limit and parking restrictions were verified by checking the resolutions from DocStar and

by viewing digital video log and live internet street views. Signal timings are verified by the time sheets, however, timing adjustments can be me made in the field at any given time which would change the estimated green time provided during our anaylsis. For example, some of our east-west beach routes in Sussex County carry heavier loads of traffic during the summer when compared to the rest of the year, which could result in higher than typical green times. For these segments, the green time values reported represents a more typical peak green time during the rest of the year. Therefore, the prevailing signalization and green time were verified by using our knowledge of the location and by contacting the TMC when necessary. We also relied on experience and knowledge of the Traffic Studies staff from numerous field reviews that are performed regularly to update and maintain many of the items.

In 2007, we were tasked with updating all 643 segments for the state of Delaware. Given the limited personnel and resources, we came to an agreement with the DelDOT Planning section to update as many as possible before the June 15th, 2007 FHWA submission deadline and to finish the rest as expediently as possible. As of May 21, 2009, all updates to the segments for New Castle, Kent, and Sussex County have been completed.

HPMS Console Problems

- This year we were supplied with an excel spreadsheet listing all the items and also the Console was available for use. We ran into no problems using the spreadsheet and the manual methods with aerials and files as described above. We did, however, run into some problems while using the Console. All three counties were started by using the Console to collect and input data, but the problems we ran into were very time consuming and unable to be fixed before the FHWA Submission deadline, so the decision was made to submit the data using the spreadsheet. Below is a list of the errors we commonly had with the Console:
- Slow processing time (especially when panning or zooming)
- Null error occurred on random and would require the Console to be restarted
- Mile point readouts where not correct when compared to the Traffic Summary Book
- Console segments beginning and end points did not always match with the spreadsheet segments
- Item 61 (Peak Parking) and Item 78 (Percent Passing Sight Distance) were not listed in the console

For New Castle County: Peter Haag (DelDOT) Traffic Studies Engineer Tel. (302) 659-4084 Fax (302) 653-2860 Email: Peter.Haag@state.de.us	For Kent County: Kristen Melendez (DelDOT) Traffic Studies Engineer Tel. (302) 659-4096 Fax (302) 653-2860 Email: Kristen.Melendez@state.de.us	For Sussex County: Naa-Atswei Tetteh (DelDOT) Traffic Studies Engineer Tel. (302) 659-4097 Fax (302) 653-2860 Email: *Naa-Atswei.Tetteh@state.de.us*

Information provided by:

- **Year of Future AADT (Forecast Traffic 2030)**

Mike DuRoss, a supervisor in DelDOT's Division of Planning, provides traffic forecasts for the department. The forecast traffic year for this HPMS submission is 2030, the same as last year's submission. The 2030 horizon year is consistent with the latest adopted long-range transportation plans for Delaware's two MPO's, the Wilmington Metropolitan Area Planning Council, and the Dover/Kent MPO. The Division of Planning's "Peninsula Travel Demand Model" produced the 2030 forecast traffic, Version "Clean Model 15B" prepared by WRA in September, 2008. This is a standard five-step travel demand model in the CUBE Voyager software (Version 5.0.1, September, 2008) that covers Delaware's three counties but also includes the nine counties of Maryland's Eastern Shore.

The model described above was used to develop projections for the year 2030 in this year's new HPMS sample sections. It was also used to review projections for all Interstate, freeway and expressway samples as the projections on those sections tend to be very sensitive to the annual updating of traffic counting data. As with last year's HPMS submission, this submission included a review of traffic data for all samples in the HPMS universe. This comprehensive review used the latest version of DelDOT's travel model which also included updated population and employment data for all Traffic Analysis Zones in New Castle County as well as the nine Maryland counties, and was based upon an updated traffic assignment calibration using DelDOT's "2005 Traffic Summary". As noted above, this comprehensive review used the forecast horizon year from the 2030 planning horizon year of the WILMAPCO Long-Range plan for New Castle County and the Dover/Kent MPO Long Range plan for Kent County.

Due to the number of samples reviewed for traffic forecast growth factors in this year's submission, the HPMS console was not used because time constraints did not permit the traffic forecasting staff to learn the menu systems and other aspects of that particular software. It is again noted that use of the HPMS console is a recommendation for traffic forecasting for next year's HPMS submission. It is noted that the travel model was calibrated to the 2005 AADT's, the future year growth factors were derived from the 2005-2030 period and applied with manual adjustments as necessary. The travel model will be recalibrated to 2008 traffic counts in the summer of 2009. The travel model horizon year will be extended to 2025 or 2040 prior to the next HPMS submission at least for New Castle County, as the next update of the WILMAPCO long range plan will require that effort be completed.

The contact person in charge of forecasting traffic in DelDOT is:
Michael DuRoss
Transportation Planning Supervisor
302-760-2110
Michael.Duross@state.de.us

Delaware Interstate Travel

The following Interstate routes exist in Delaware.

Interstate Route	Total Miles	Urban Areas Served
95	23.43	Philadelphia
295	5.71	Philadelphia
495	11.47	Philadelphia
Total	40.61	Philadelphia

Since 1995, the traffic on the Interstate has continued to fluctuate, while the number of miles has remained the same. The following table shows the Daily Vehicle Miles of travel on the Interstate routes since 2000.

DVMT on Interstate Routes

Year	DVMT (000)	Change
2000	3,807	-0.92%
2001	3,789	-0.46%
2002	3,766	-0.61%
2003	3,808	1.12%
2004	3,852	1.15%
2005	3,793	-1.56%
2006	3,633	-4.21%
2007	3,533	-2.78%
2008	3,423	-3.11%

Since 2000, the DVMT on Delaware Interstate routes has been almost stagnant. The DVMT peaked in the year 2004. As indicated by the DVMT table above. A four-year trend of declining traffic on Delaware's Interstate Routes since 2004 can be attributed to congestion and higher tolls. Also, the Interstate routes in Delaware connect with major airports in the adjacent states, where the airlines have cut down services due to higher fuel cost and low load factor.

Traffic Trends at the Permanent Counter location sites on the Interstate

Site	Location	2007 AADT	2008 AADT	% Change
8000	I-95 - JFK Turnpike Toll Plaza	74,077	70,240	-5.18%
8001	I-295, Memorial Bride Toll Plaza	96,584	92,270	-4.47%
8004	I-495, near Boulevard Body Shop	64,830	64,429	-0.62%

Delaware Interstate Ramps

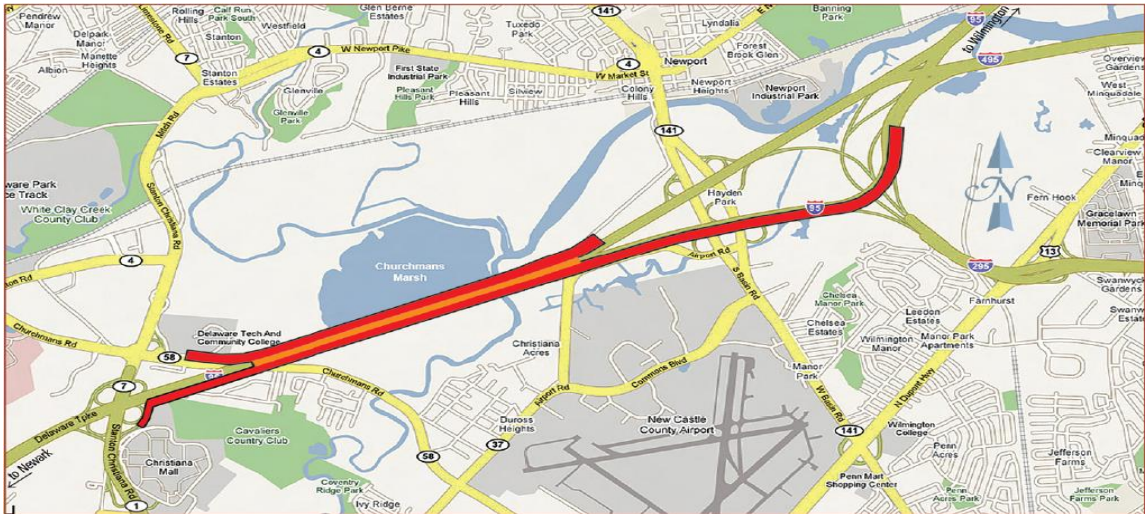
The Interstate **ramp** data are presented below.

Interstate Route Ramps	Miles	Lane Miles	Urban Areas Served
95	22.41	25.67	Philadelphia
295	8.05	10.76	Philadelphia
495	6.82	6.90	Philadelphia
Total	37.28	43.33	Philadelphia

While the Interstate mileage is only 40.61 miles in the entire state, there are 37.28 miles ramps along the Interstate routes. Since the ramp mileage is significantly disproportionate, the FHWA and Congress should modify the federal-aid formula to include Interstate ramps for equity in the apportionment.

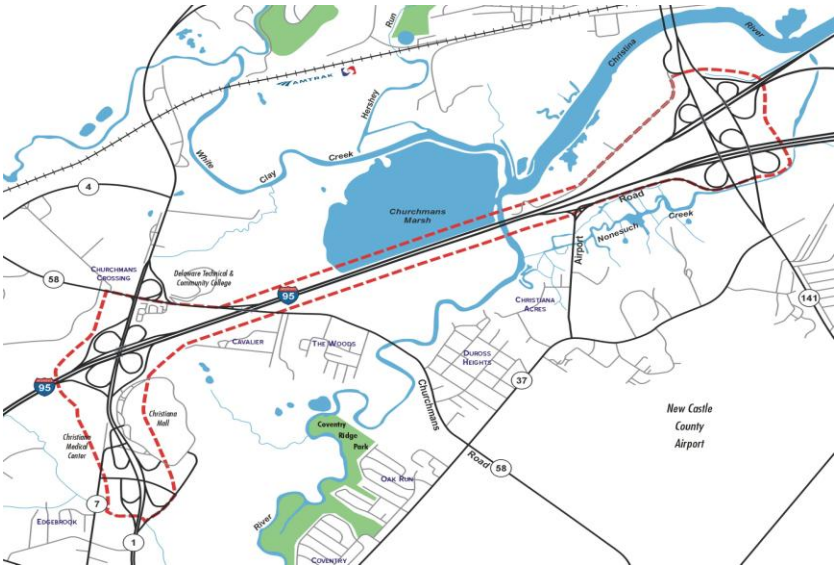
SR - 1 Interchange/ I-95 Mainline Area

In 2008, DelDOT completed the I-95 Mainline Widening Project. This project included adding an additional travel lane along the Mainline I-95 in both the northbound and southbound directions. In the northbound direction, the additional lane went from the SR-1 on ramp to north of the I-295 interchange ramps. In the southbound direction, the additional lane went from the SR-141 interchange to just past the Churchman's Road Bridge. The project construction cost was approximately $58M and was completed in 551 calendar days through an accelerated A + B bidding process.



DelDOT is working in the final design on the SR-1/I-95 interchange project. This project will provide high-speed connector ramps from I-95 to SR-1 and the reverse. The area is continually congested due to continued development, high traffic volumes, limited ramps movement, etc. We have already completed and gotten Federal approval on the Environmental Re-evaluation and have an approved IAPA report from the FHWA. The total cost of the Interchange project will be in excess of $165M. Work will not begin until 2011.

A map of the interchange and the area is presented below:



SR – 1 / I – 95 Interchange and Vicinity

This is a recurring roadway condition and we will continue to report these locations operating at undesirable level of service until these projects are completed.

(Source: Darren O'Neill, Project Manager)

Traffic Congestion

When the Volume/Service Flow Ratio (V/SF) ratio exceeds 1.20 at a sample section, the HPMS data process sends an error message in the output. The default in HPMS software is that the V/SF ratio must not exceed 1.20, because the capacity would not allow such a high level of traffic flow. However, V/SF ratios in excess of 1.20 do occur on several highway segments in Delaware.

The best example of this condition is on Delaware Route 24, south of Route 1, in Sussex County. The observed V/SF ratio of 1.29 is correctly reported. However, it appears to overstate the situation because the traffic does continue to flow through the section, where this ratio is observed. These are summer related seasonal traffic. The Department depends on the consulting firm Chaparral for traffic monitoring activities. The existing traffic counts are 2008 data. This area is congested and the drivers seem to accept lower headways and lower speeds.

The following table shows the mileage by county, where the V/SF ratio continues to exceed 0.80 since 2000.

Miles by County with Volume/Service Flow Ratio (V/SF) exceeding 0.80
(V/SF multiplied by Sample Expansion factor)

Year	County			
	New Castle	Kent	Sussex	Total
2000	35.62	12.20	9.37	56.23
2001	41.89	17.46	36.94	96.29
2002	71.68	16.38	22.70	110.77
2003	80.93	15.26	19.12	113.80
2004	66.38	12.95	30.99	110.32
2005	60.45	13.37	21.79	95.61
2006	83.85	16.99	43.40	144.24
2007	71.71	7.09	34.36	113.17
2008	23.51	3.76	31.57	58.84

The above table shows that there were 58.72 miles of road in the year 2008, where the V/SF ratio exceeded 0.80.

In New Castle County, there were 23.51 miles of congestion including 7.30 miles on urban interstates (I-95, I-295 & I-495) in the Philadelphia Urbanized Area. There is also a small section on SR-1 (Freeway & Expressway).

In 2008, a section of I-95 was widened from 8 lanes to 10 lames. The excessive congested conditions have improved since the major widening of the Interstate. The public and commercial traffic prefer to use interstate for travel.

This Northeast Philadelphia corridor, which extends through Pennsylvania, Delaware, and Maryland, has no easy solutions to address this ongoing congestion. Perhaps, the implementation of congestion pricing, as Europe has done, may be a viable alternative.

After the completion of SR-1 (toll) freeway in 2004, this route became the primary corridor for travel to the state capital in Dover, and to Delaware's beaches. Merging from the SR- 1 (toll) freeway to I-95 is a major bottleneck and is severely congested throughout most of the year.

In Kent County, congestion is primarily the result of through traffic merging with local traffic during the peak hour in the Dover urbanized area. Both U.S 13 and U. S. Route 113 in this county have multiple commercial strip developments, which cause traffic congestion throughout the year.

The primary cause of congestion in Sussex County is caused by heavy seasonal traffic to the Delaware and Maryland beaches from points in the Philadelphia, Wilmington, Baltimore and Washington, DC areas during the summer. This beach traffic passes through several small towns merging with local traffic, which causes congestion. During 2008, there was 8.24% decline in the congestion mileage in Sussex County. Factory outlets, which once captivated the beach traffic, are now unable to attract buyers due to recent changes in consumer spending. The credit card users seem to have reached their limit, and for the first time, a decline in sales has been observed. Buy one and get one free sales pitches have failed to attract buyers caught up with high energy costs which has cut into their buying power.

Major reduction in traffic congestion can be attributed to the nation's economic condition.

SR-1 Toll Route

Toll bridges are installed on certain intermittent sections of SR-1. As a result; the motorists do avoid tolls at various locations throughout its length.

One location is at the Smyrna Rest Area which straddles both the local road and SR-1, which is a toll route there. Motorists can freely enter or exit the toll route at this location. For this reason toll revenues are not as high as would be expected.

Another location is at SR-1 Bridge over the Chesapeake and Delaware Canal in New Castle County. The Army Corp of Engineers maintains all bridges over the C& D canal and one of its agreements with Delaware is not to collect any tolls to use them. At this location, a lot of local traffic exits at the end of the bridge and proceeds to Route 13 to bypass the toll bridge for $1.00 toll during the week and $2.00 toll on weekends. Many out of state travelers are not aware of this and just continue on SR-1 toll bridge following their GPS navigation units installed on their vehicles.

The HPMS sample sections on SR-1 exceed the sample adequacy requirement. The reporting of data shall continue from all of those sample sections**.**

Delaware Transit Ridership Trend

The table below shows that there was a significant change in Delaware Transit Ridership. Since 2000, there has been a net increase of 18.02% which exceeds the growth of total population at 11.79%.

Fiscal Year	Transit Ridership	Yearly Change	Cumulative % Change
2000	8,944,828		
2001	9,260,336	3.53%	3.53%
2002	9,045,281	-2.32%	1.12%
2003	8,785,314	-2.87%	-1.78%
2004	9,224,929	5.00%	3.13%
2005	9,602,722	4.10%	7.36%
2006	10,238,738	6.62%	14.47%
2007	10,154,338	-0.82%	13.52%
2008	10,556,609	3.96%	18.02%

Source: Delaware Transit Corporation

Higher fuel prices, congestion on the main travel routes in the urbanized areas, increasing travel times, and the rising cost of parking in central business districts are making transit a more viable alternative to driving. However, there is another significant component to the growth shown here. The figures in the foregoing include paratransit, which serves the elderly and persons with disabilities. Delaware Transit offers special discounts for seniors and the disabled. As the general population ages, the state of Delaware continues to attract retirees from other states, particularly to Sussex County, where the demand for paratransit is growing rapidly.

For beach traffic, Delaware Area Resort Transit (DART) offers special discounts, and also free transfers to connect with Ocean City.

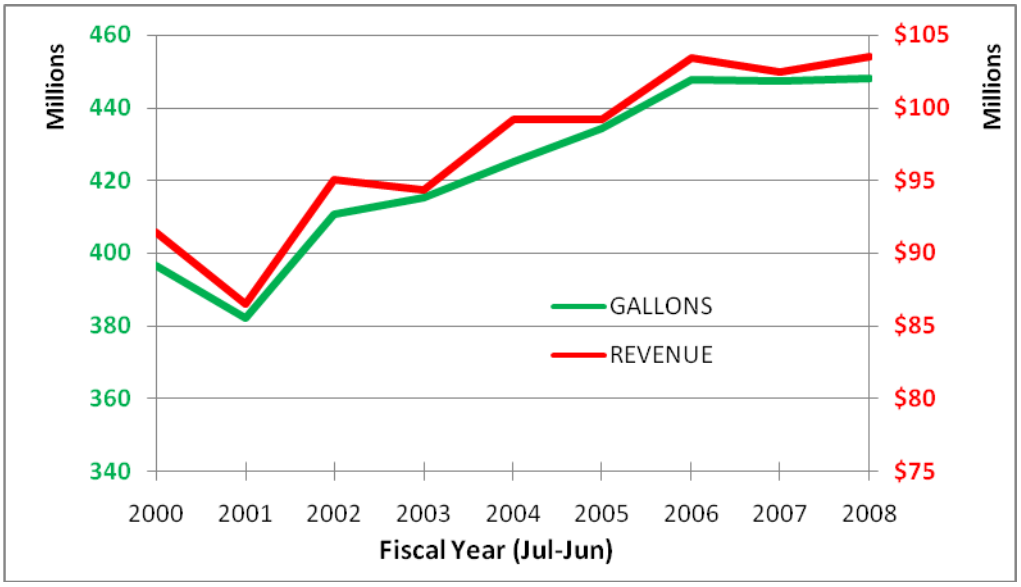
Delaware Gasoline Consumption/Revenue

The following table and graphics show gasoline consumption and the state revenue collected from gasoline sales in the state from FY2000 to FY2008 (July 1-June 30).

Gasoline Consumption/Revenue

FY	GALLONS	% BASE	%/Ann	REVENUE	% BASE	%/Ann
2000	396,439,626	BASE		$91,426,164	BASE	
2001	382,107,442	-3.62%	-3.62%	$86,497,377	-5.39%	-5.39%
2002	410,727,263	3.60%	7.49%	$95,064,201	3.98%	9.90%
2003	415,364,330	4.77%	1.13%	$94,365,047	3.21%	-0.74%
2004	425,075,277	7.22%	2.34%	$99,145,271	8.44%	5.07%
2005	434,107,363	9.50%	2.12%	$99,162,587	8.46%	0.02%
2006	447,641,622	12.92%	3.12%	$103,394,033	13.09%	4.27%
2007	447,204,018	12.81%	-0.10%	$102,382,062	11.98%	-0.98%
2008	447,962,052	13.00%	0.17%	$103,471,297	13.17%	1.06%

Source: Michael J. Harrell, Motor Fuel Tax Administrator, DelDOT/DMV



With the increased volatility of fuel price during FYs 2007 and 2008, the consumption and the revenue remained relatively flat. Delaware had no change in the tax structure as it relates to motor vehicle fuels

A comparison of the average retail price of gasoline in Delaware and its neighboring states on June 2, 2007 and June 2, 2008 is presented in the following tables. The price of diesel is added to the second table along with the average price nationwide for 2008 and 2009 in the graphics.

In 2008, the fuel prices remained under volatile market pricing peaking at a national average of $4.11/gal in July 2008, and bottoming at $1.63/gal in December 2008.

Source: Energy Information Administration

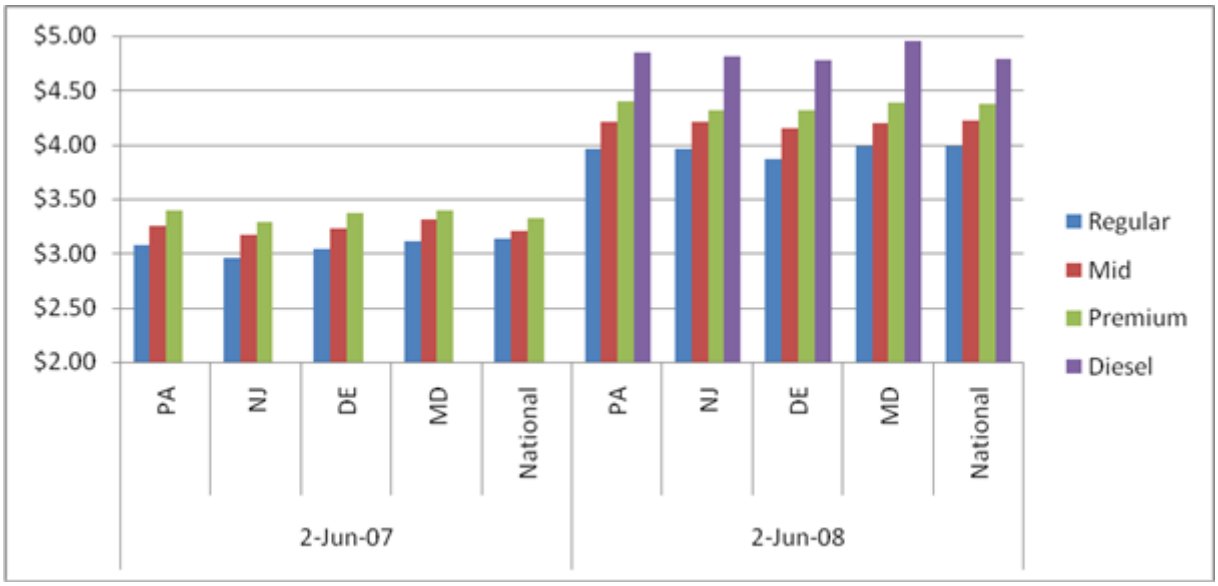
Retail Average Gasoline Price on June 2, 2007

State	Regular	Mid	Premium
Pennsylvania	$3.08	$3.25	$3.39
New Jersey	$2.96	$3.17	$3.29
Delaware	$3.04	$3.23	$3.37
Maryland	$3.11	$3.31	$3.39

Retail Average Gasoline Price on June 2, 2008

State	Regular	Mid	Premium	Diesel
Delaware	$3.96	$4.21	$4.40	$4.85
Maryland	$3.96	$4.21	$4.32	$4.81
New Jersey	$3.87	$4.15	$4.31	$4.77
Pennsylvania	$3.98	$4.20	$4.39	$4.95
National	$3.98	$4.22	$4.37	$4.79

Source: Fuel Gauge Report



It is observed that the motor fuel prices remained almost equal in Delaware and Maryland, and were slightly higher in Pennsylvania but slightly lower in New Jersey.

It is also observed that the sale of motor fuels increased by 1.06 % in 2008 over the previous year, while the annual vehicle-miles of travel decreased by 5.22 % during the same period in Delaware.

Such a strange occurrence is attributed to the disparity in cigarette taxes in the neighboring states as presented below.

CIGARETTE TAXES (per pack)

Delaware	$1.15
Maryland	$2.00
New Jersey	$2.57
Pennsylvania	$1.35

Source: Tax Foundation

Because the cigarette tax is low in Delaware, it appears that the motorists from neighboring states are crossing the border into Delaware to purchase cigarettes and fill up gasoline to save money. The cigarette tax allures interstate motorists on I-95 passing through a small distance in Delaware to stop at rest area, purchase gasoline and cigarettes without adding much to the vehicle-miles of travel.

In 2008, many independent truck owners/operators were unable to bear the substantial high toll increases and higher prices for diesel. They have thus changed their travel routes. Some of them have chosen to idle their vehicles. Unable to compete, they are now out of business.

The truck traffic, as a percentage of AADT, has also shown a decline.

Delaware is a small state and many drivers traveling through the State on I-95, I-495, and I-295 are able to pass through the entire State without purchasing gas. In this age of internet access and instant media, the public is well aware of the gas prices in surrounding areas. There are always proposals to generate extra revenue by increasing most of its vehicle-related revenue including a possible increase in the state gas tax. However, it appears that the option of increasing state fuel taxes was not feasible for many reasons including a desire to maintain competitive pricing with surrounding states.

On the Federal-Aid Apportionment

HPMS data constitute one of the tools to determine Federal-Aid apportionments among the 50 states and D.C. The apportionment uses a formula-based principle. Delaware is one of the smallest states in terms of population, land area, NHS mileage, and vehicle-miles of travel. Because of this, Delaware suffers from being a “minimum apportionment” state.

Data provided under the Delaware Interstate Travel report, shows that the State's Interstate lane mileage increased in 2008 from 253 to 261. Since the year 2000, Delaware's Vehicle Miles Traveled remain stagnant. There are many possible reasons for these trends. One in particular is that certain key roads have been operating at an undesirable level of service especially during peak hour conditions. To reduce traffic demand during peak hours, toll increase and congestion pricing were contemplated, though not enacted.

By adding extra lanes in 2008 for most heavily travelled part of I-95, DelDOT has reduced the congestion on the I-95 corridor. But on account of the economic conditions, there was a 3.12% decline of DVMT on the Interstate routes. The decline of toll collection will affect the State's revenue for maintenance and operations.

The current interstate and intersection projects, mentioned further below in this section, have an estimated cost of more than $326 million dollars. In the past, the delay and shifting of projects to later years often resulted in cost overruns because each year the cost of construction has continued to escalate. For a small state with limited resources, these overruns can result in a major financial burden, which limits the State's ability to undertake and fund essential projects.

Indian River Inlet Bridge

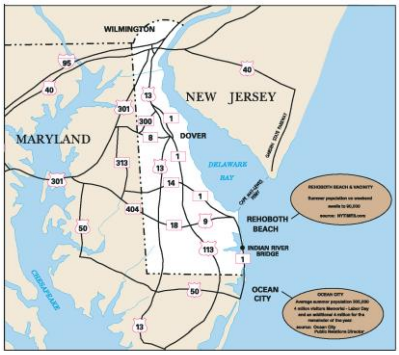
Constructor Skanska USA Civil Southeast, Inc., teaming with designers AECOM Transportation, received the notice to proceed for work on the Indian River Inlet Bridge in September, 2008, and proceeded in earnest to design and begin building the cable-stayed bridge structure. The Designer continued to analyze and detail components of the structure beyond the pre-bid stage on to final design, with some elements, such as piles, completely designed and ready for construction by the end of 2008. As part of the complete design of the bridge, the Team is evaluating wind, scour, and geotechnical parameters, including complete wind-tunnel testing of a small-scale bridge model. These studies will be completed in the first half of 2009. Additionally, the cable-stayed bridge component system will undergo rigorous tests to assure its strength and durability will meet criteria for the life of the structure. The bridge design continues

to develop according to a schedule that factors the needed construction dates of components in a planned progression to meet a target date of April 30, 2009 for substantial completion.

Shortly after the contract was awarded, test piles were installed and instrumented to provide additional information about the soil properties and best methods of foundation construction. Results from the test pile program were used in the on-going design of the structure. By the end of 2008, the precast yard was fabricating and casting the piles; this operation will continue throughout 2009 and eventually include precast girders. At the bridge site, the main-span bridge pylons are on the critical path of construction with pile-driving operations occurring simultaneously on both sides of the Inlet. The towers will be erected during 2009, while the precast girders for the approach spans are to be erected on shoring and finished with a concrete cast-in-place deck. Superstructure construction for the main span will continue in 2010 and early 2011, and include the use of an overhead traveling form system to cast full-width segments of the bridge over the waters of the Inlet without impeding public pedestrian as well as boating traffic below.

Karen Cormier, P.E.
Assistant Project Manager
Indian River Inlet Bridge
Phone: (302) 226-1251
CormierKaren@state.de.us

The Indian River Inlet Bridge, now on NHS, will serve the summer traffic between Rehoboth Beach and Ocean City, Maryland. The traffic demand is extremely high as the accompanying figures indicate.



REHOBOTH BEACH & VICINITY
Summer Population on Weekend Swells to 90,000
Source nytimes.com

OCEAN CITY Average Summer Population 305,000 4 million visitors Memorial-Labor Day and additional 4 million for the remainder of the year Source: Ocean City Public Relations Director.

Distance: 27.2 miles Approximate Travel Time: 50 minutes

Three Major Projects

At present, DelDOT is working on three major projects which would cost $ 1,279,151,000 upon completion. The table below shows the existing expenditure status. At 80% Federal participation, the state share amounts to $255,830,200. While these projects serve national travel needs, it represents an enormous capital burden for a small state.

Delaware's Current Major Transportation Projects				
Dollars in thousands				
Project Title	Est. Total Funds	Funds Spent FY2008	Funds Spent to Date	Percent Funds Expended
I-95 MD State Line to I-295	$304,400	$1,025	$298,100	97.93%
Indian River Inlet Bridge	$213,501	$5,984	$32,400	15.18%
US 301 and Spur Road	$761,250	$4,047	$32,900	4.32%
Total	$1,279,151	$11,056	$363,400	28.41%

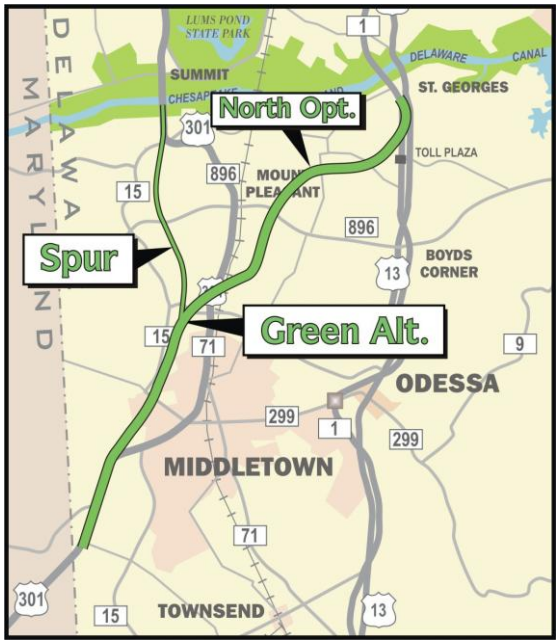
Source: Delaware Department of Transportation, Division of Finance, March 11, 2009.

Delaware has 6,281.25 total certified miles of roadway, out of which 4,748 miles of roads are not eligible for Federal-aid. Thus, a huge disproportionate length covering 75.59% of the state mileage is ineligible for any Federal-aid participation. In view of this, it seems a review is necessary to increase Federal-aid for highway improvements in a small state like Delaware.

U.S. 301, DE/MD State Line to SR1, South of the Chesapeake & Delaware Canal

DelDOT is working on improvements to the U.S. 301 Corridor in Delaware, from the MD State Line to SR1, South of the Chesapeake and Delaware Canal. The existing U.S. 301 in Delaware is a two-lane highway with signalized and unsignalized access points. The corridor is experiencing congestion and increases in accidents caused by a growth in population in this area of New Castle County and the use of the roadway for regional traffic, including large percentages of trucks.

To address these short and long-term transportation needs, DelDOT, on behalf of FHWA, initiated an Environmental Impact Statement (EIS) in 2005, and evaluated alternatives consistent with the National Environmental Policy Act (NEPA). A Draft EIS was published in November 2006, with a Final EIS published in November 2007. A Record of Decision (ROD) was issued by FHWA on April 30, 2008. The ROD selected a four lane limited access highway, from the MD State Line to SR1, and a two lane "spur" from the Armstrong Corner Road area to connect to the Summit Bridge over the Canal. The Selected Alternative, Green North + Spur, is shown below:



Design of the project was started in the fall of 2008. The design and right-of-way process is expected to be complete by 2011. Construction of the project could potentially begin at the end of 2011. Construction is expected to take between 4 to 5 years.

The Selected Alternative will reduce traffic congestion and improve highway safety by removing through traffic, especially heavy truck traffic, from local roads in the rapidly developing area. The project will improve the current road conditions and will also promote the safety, health and general welfare of the citizens in this area and those that are traveling through the region. (Source: Diane Bernardo, U.S. 301 Project Engineer, DelDOT)

Transportation Challenges

Because of the increasing demands on the State's transportation system, limited resources for the design and construction of necessary projects to improve safety and provide needed mobility, and increases in the costs of land acquisition, labor and raw materials needed to construct and maintain a variety of transportation improvements, the State may be unable to provide, on a timely basis, key projects identified in the Department's Capital Transportation Program.

To help meet transportation needs a new revenue package was implemented in fiscal 2008 and included toll increases on both of Delaware's toll roads, as well as several Division of Motor Vehicle fee increases. A new non-pledged revenue source was also added to the Trust Fund in the form of a 50% surcharge on traffic violation fines.

Current Financial Plan

The revenue sources are combined with the proceeds of the Transportation System Revenue Bonds and support from the federal government to fund the Department's total transportation budget - both operating and capital. The Department updates its six-year financial plan concurrent with the preparation of the annual operating and capital budgets.

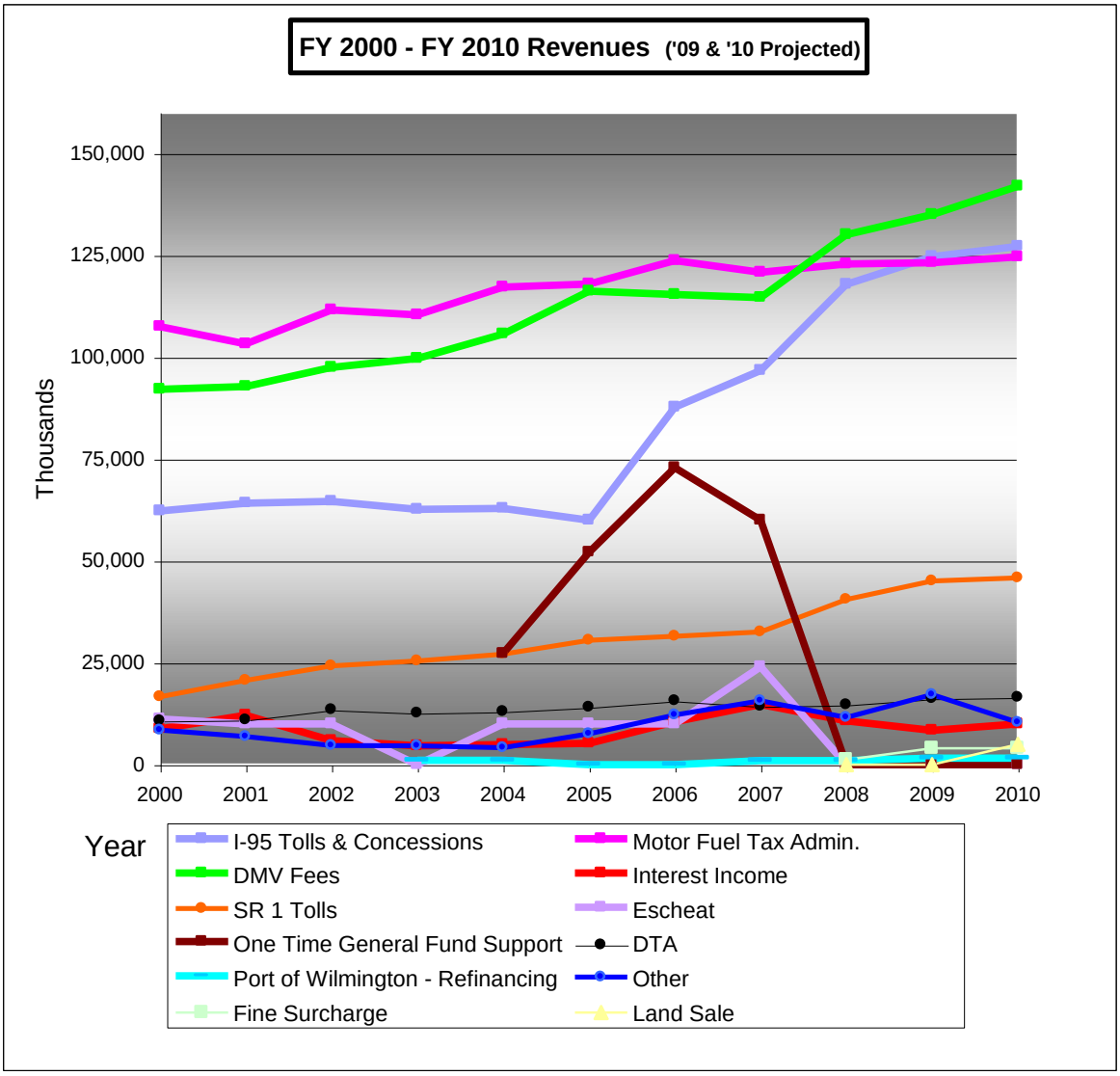
The current financial plan assumes that the existing sources of revenues will meet projections without any further increases in the rates or fees. In the event revenues or other sources fall short of projections, the Department will either request additional revenues from the General Assembly, reduce the transportation program or a combination of both. The reductions will be done to a level which results in the Department continuing to meet the parameters established in its financial management guidelines of paying for at least 50% of its capital program with current revenues with debt service coverage of at least 2.25 times.

Transportation Trust Fund Revenues

($ in 000s)

										projected	projected
State Fiscal Year	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Pledged Revenues											
I-95 Tolls & Concessions	62,307	64,133	64,584	62,637	62,861	60,021	87,696	96,748	117,869	123,200	124,600
Motor Fuel Tax Admin.	107,532	103,239	111,586	110,403	117,225	117,917	123,714	120,804	122,866	124,700	127,200
DMV Fees	92,134	92,822	97,501	99,678	105,663	116,180	115,415	114,629	130,079	135,000	142,000
Interest Income	8,823	12,123	5,879	4,592	4,923	5,207	10,523	14,774	10,776	8,400	10,000
Total Pledged Revenues	**270,796**	**272,317**	**279,550**	**277,310**	**290,672**	**299,325**	**337,348**	**346,955**	**381,591**	**391,300**	**403,800**
Non-Pledged Revenues											
SR 1 Tolls	16,650	20,709	24,223	25,443	27,101	30,563	31,524	32,606	40,509	45,100	45,800
Other Transportation Revenue	8,478	6,883	4,712	4,612	4,191	7,597	12,196	15,704	11,559	17,173	7,900
Total Non-Pledged Revenues	**25,128**	**27,592**	**28,935**	**30,054**	**31,292**	**38,160**	**43,720**	**48,310**	**52,068**	**62,273**	**53,700**
Other Sources											
Escheat	11,245	10,000	10,000	0	10,000	10,000	10,000	24,000	0	0	0
General Fund Support	0	0	0	0	**27,300**	**52,100**	**72,869**	**60,000**	**0**	**0**	**0**
Port of Wilmington - Refinancing	0	0		1,065	1,059	0	0	1,000	1,000	1,618	1,618
DE Transit (Farebox, FTA, & Other)	10,732	10,961	13,511	12,640	13,064	14,100	15,676	14,332	14,705	16,219	16,543
Fine Surcharge Revenue									1,184	4,000	4,000
Property Sale Revenue									0	0	5,000
Total All Sources	**317,901**	**320,870**	**331,996**	**321,069**	**373,387**	**413,685**	**479,613**	**494,597**	**450,548**	**475,410**	**484,661**

FY2009 and FY2010 DEFAC Forecast, December 2008



I-95 Tolls, SR-1 Tolls, and DMV Fee Revenue all increased in FY2008 due to the implementation of the new revenue package that became effective October 1, 2007. Fee increases from the revenue package affected 9 months of FY2008. FY2009 also benefited from the additional 3-months of the new fee increases. The escheat transfer was temporary suspended in FY2008 and FY2009. The FY2010 escheat transfer will likely be suspended also. FY2009 and 2010 revenue projections are based on December 2008 DEFAC approvals.

Shift in the State Economy

Delaware, known as the First State, is also first in providing a pro-business climate. It is a corporate state where nearly 6 out of 10 Fortune 500 companies are incorporated. Delaware has been the home of the world famous DuPont and other large chemical industries. The major north-south divided highway passing through the state, from Maryland to Pennsylvania, is the historic DuPont Highway. There are automobile manufacturing plants in Delaware. Credit card operation has been a lucrative business in the banking sector of the state. Slot machines generated state revenues. Moreover, Delaware is a major shopping attraction for consumers in the entire region, since there is no sales tax in Delaware.

However, the downturn in economy nationwide over the past two years has taken its toll in the state. The automobile manufacturing has ceased to exist. There are unprecedented layoffs in the banking and chemical industries. The largest decline in employment has been in professional and business services, construction, manufacturing, wholesale, and retail sectors. The total loss in these sectors, over the past 12 months, exceeded 20,000 jobs. Besides, several major retailers have closed their business in Delaware. The travel from out-of –state consumers has appreciably decreased. As a result, there is a loss of hotel tax revenue, highway tolls, and jobs in the retail sector.

Unemployment and a lack of consumer spending are the primary reasons for a sharp decline in the state revenues. Thus there is a serious budget crisis for the first time in Delaware. It is mandatory for the State of Delaware to balance the budget every year; there is no bailout by the U.S. Treasury to save the state from budget deficit. In consequence, the Transportation Improvement Program is in jeopardy.

The state will receive Federal-Aid Apportionment based on the HPMS Report presented herein, but the state participation is essential almost in all projects. Also, there are public highways and streets in need of improvements, which are not on the Federal-Aid System, and will need 100 % state participation.

To marginally sustain the ongoing program, the state has come up with a revenue enhancement package that includes an increase, primarily in the motor vehicle fees, tolls, and driver's license. In spite of the recurring inflation, these fees were not increased for over a decade in the past. This revenue package does not include any increase in the motor fuel taxes, although the price of motor fuels has significantly increased during the past two years, and the recent dramatic fluctuation in the price of gasoline was substantially higher than the combined state and Federal motor fuel taxes. In consideration, the Federal gasoline tax is likely to increase by 18 cents per gallon in the near future.

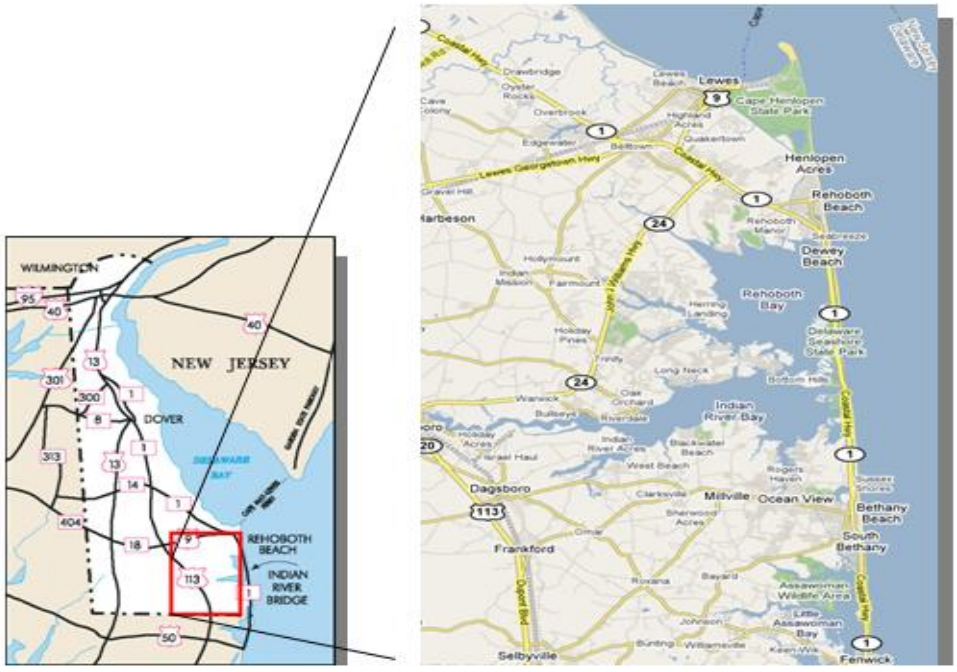
Delaware Scenic Coastal Highways & Global Warming

There are approximately 117 miles of coastline on the east side of Delaware. Except for a small stretch in the middle, the coastline is served by interconnected roads and two major highways: SR-9 on the north and SR-1 on the south running as an Arterial Highway into Ocean City in Maryland.

State Route 9 is a 52-mile road that runs from the historic City of New Castle to south of Dover Air Force Base mostly along the western shore of the Delaware River and Bay. It passes over the C & D Canal and through communities such as Delaware City and Leipsic. There are lush green farm fields that stretch for miles along this route. Moreover, the corridor of SR-9 contains the largest area of preserved coastal marshland, nearly 50,000 acres, on the east coast. Surrounded by natural beauty, Delaware Route 9 was recently named "Coastal Heritage and Scenic Byway" by the State of Delaware.

With the Reedy Point Bridge over the C & D Canal, State Route 9 also serves as a north-south connector in addition to SR-896, US 13, and SR-1 in the state. This route relieves traffic congestion from its parallel routes. This route also has the potential to serve vehicular traffic by boat to and from New Jersey across the Delaware River. With the National Park along the C & D Canal in the planning, the future development of SR-9 is apparent.

State Route 1 on the south serves the coastline alongside the Atlantic Ocean in Delaware. The ocean view coastline is about 25 miles from historic Lewes to Fenwick Island through Rehoboth, Dewey Beach, and Bethany Beach. This stretch of coastline is lined with captivating sand beaches that attract sun worshippers from all over the region. Three state parks are located here within 12 miles of the beachfront. The resorts, comprising Lewes, Rehoboth Beach, Bethany Beach, and Fenwick Island are devoid of high-rise buildings as each retains a small-town charm.



In "Global Warming Effects on Delaware Wildlife", the National Wildlife Federation has reported that the sea level near Lewes has risen about one foot in the last 100 years. The Federation also predicts that there would be 23 inches additional rise in sea level near Lewes by 2100 (globalwarming@nwf.org). The Philadelphia District of the US Army Corps of Engineers (USACE) has recently completed two beach nourishment projects here to protect the desirable beach width. The USACE also has a three-year beach nourishment program for the protection of these ocean beaches from tidal storm.

Apart from cyclic beach protection projects, the Delaware coastline is vulnerable to nor'easter. There is a severe loss to tourism, local business, homeowners, wildlife, wetlands, and significant damage to SR-1 whenever this calamity strikes the Delaware coastline. DelDOT expends considerable resources to repair the damages to SR-1 by nor'easter. Unfortunately, there is no provision in the Federal-aid Apportionment formula to provide for damages to Arterial Highways by a nor'easter. However, the replacement of the Indian River Inlet Bridge, as a Federal-aid Highway Project, is in progress.

There is severe traffic congestion in the SR-1 Corridor near the coastline, particularly during the summer months. DelDOT provides Resort Transit Service with extra buses from Memorial Day to mid-September to alleviate traffic congestion in this area. There are also Park & Ride Free plus Bikes on Buses provisions by DelDOT to mitigate traffic problems. Nonetheless, certain signalized intersections lack capacity in this corridor.

Congestion Management in Delaware

Traffic congestion in Delaware is managed principally by the Delaware Department of Transportation (DelDOT), which is responsible for 86.30 percent of the lane-miles in the state. Also, there are two MPOs in the state: WILMAPCO and Dover / Kent County MPO. Only WILMAPCO maintain federally mandated congestion management systems (CMS) in collaboration with DelDOT.

TIS Section of Congestion Management Element of HPMS

Developer-funded capital projects tend to be small improvements such as turning lanes at intersections but can be larger, especially where the efforts of two or more developers can be coordinated. The need for these projects is typically identified through TIS and they are typically required as conditions for plan approval. DelDOT's Development Coordination Section, in the Division of Planning, works with local governments to require TIS and the improvements. In calendar year 2008, DelDOT reviewed 29 TIS, 6 in New Castle County, 6 in Kent County and 17 in Sussex County. Most of these resulted in at least some off-site improvements being required of the developers whose projects were addressed in those studies.

Significantly, the number of TIS reviewed has declined 22 percent, from 37 on calendar year 2007. This drop, and an associated decline in the number of road improvements identified

as being needed, can be attributed to the present economic situation. There have also been noticeably fewer scoping meetings held for TIS for proposed developments.

On December 21, 2007, DelDOT adopted revised regulations pertaining to subdivision streets and state highway access. These regulations included revised regulations for TIS. Among other changes, DelDOT lowered the volume warrants for when a TIS should be required, from 2,100 trips per day for residential developments and 3,100 trips per day for commercial developments to 400 trips per day for any development. To aggregate the smaller developments, those generating less than 2,000 trips per day have the option of contributing to a larger, area-wide study rather than doing a TIS of their own. While these changes should offset the effects of the economic slowdown with regard to the number of TIS, they apply only to developments that have made their initial submissions to local governments after March 31, 2008. For this reason, the full effects of these regulations have not been seen.

The revised regulations can be found in DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access. They are available on-line at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/standards_and_regulations_031108.pdf.

A TIS is also used as the primary source of information for the CMS maintained by Delaware's two MPOs; the Wilmington Metropolitan Planning Council (WILMAPCO) and the Dover Kent MPO. The CMS is used by the MPOs to identify and address congestion more comprehensively. WILMAPCO staff with DelDOT and local government participation manages the WILMAPCO CMS. Because the Dover Kent MPO has a smaller staff, DelDOT plays a greater role in helping them develop and update their CMS.

TIS reviews are performed by:

T. William Brockenbrough, Jr., P.E., AICP
County Coordinator
DelDOT Development Coordination
(302) 760-2109
Thomas.Brockenbrough@state.de.us

2. WILMAPCO Congestion Management System (CMS)

The main goal of the Wilmington Area Planning Council's (WILMAPCO) Congestion Management System (CMS) report is a "systems" approach to identifying and addressing congestion in our region. With this approach, the existence of congestion in the transportation system can be seen in more of a regional (or national) context and it becomes apparent how slight changes at a specific location can impact the operation of the transportation system as a whole. It has been produced annually since 2001, with the exception of 2006. The 2008 CMS uses a "Summary-Style" approach that has been designed to focus on the core functions of what a CMP is to perform. The goal was to create a more streamlined, data-oriented summary that serves as a resource for use in other Metropolitan Planning Organization (MPO) documents. The

report has four key sections:

Section #1: Congestion Definition and Corridor Identification

Congestion Definition

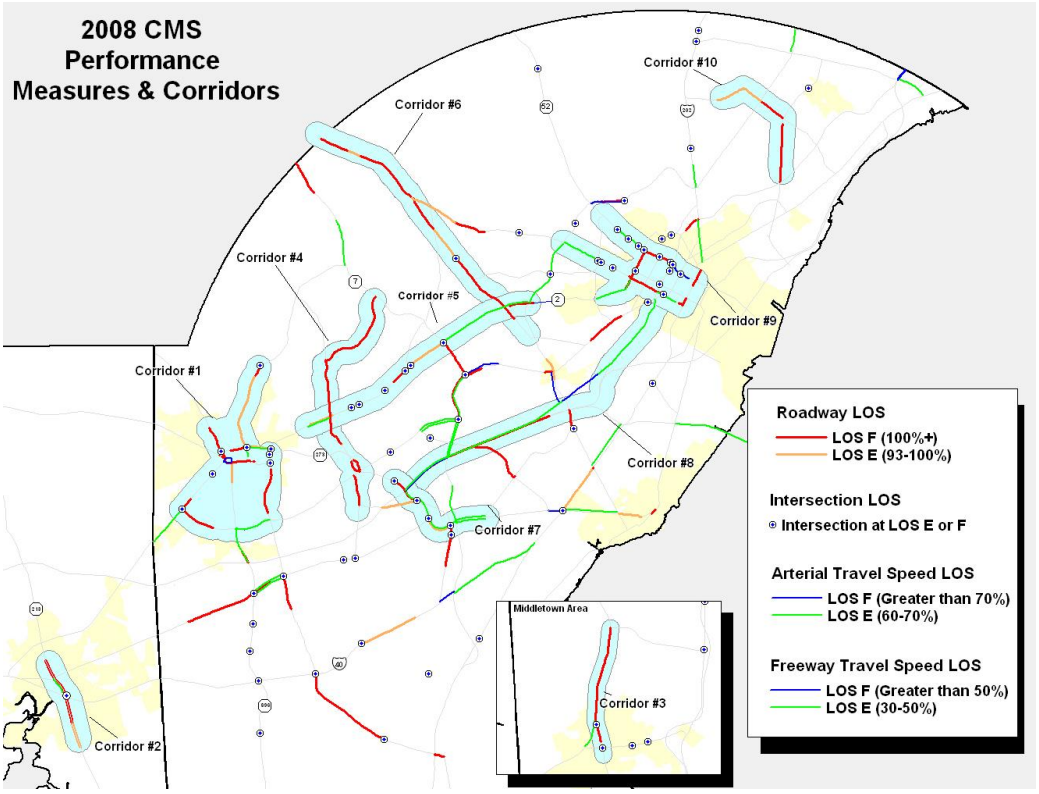
Due to constraints in data collection, the network has been limited to all roadways classified as Minor Arterial or greater according to the FHWA functional classification network. The CMS uses a series of performance measures to evaluate the current congestion level of our most traveled roadway network. Currently, performance measures used in the congestion identification analysis in this report is limited to roadway and transit (bus) congestion due to reliable data constraints. Those measures used include:

- Roadway Volume to Capacity Ratio
- Intersection Level of Service
- Roadway Travel Speeds vs. Posted Speed Limit
- Bus Load Factor (V/C ratio) by Road Segment

Corridor Identification

Using the four performance measures, the final step in the process is to delineate specific congested corridors. Members of the CMS Subcommittee identified these corridors with criteria that analyzed congestion density (number or frequency of adjacent congested segments and/or intersections) and predominant travel patterns.

Section 2: Strategy Evaluation



Potential strategies to reduce congestion have been assembled in a "toolbox" designed to provide the appropriate solutions for each corridor. Within each of these strategies, specific mitigation measures are outlined and described in detail. This package of solutions to congestion includes measures involving all modes of transportation as well as encouraging more efficient patterns of land use and development.

WILMAPCO CMS "TOOLBOX" STRATEGIES:

Strategy #1: Eliminate person trips or reduce VMT during peak hours
Strategy #2: Shift Trips from Automobile to Other Modes
Strategy #3: Shift Trips from SOV to HOV Auto/Van
Strategy #4: Improve Roadway Operations
Strategy #5: Add Capacity

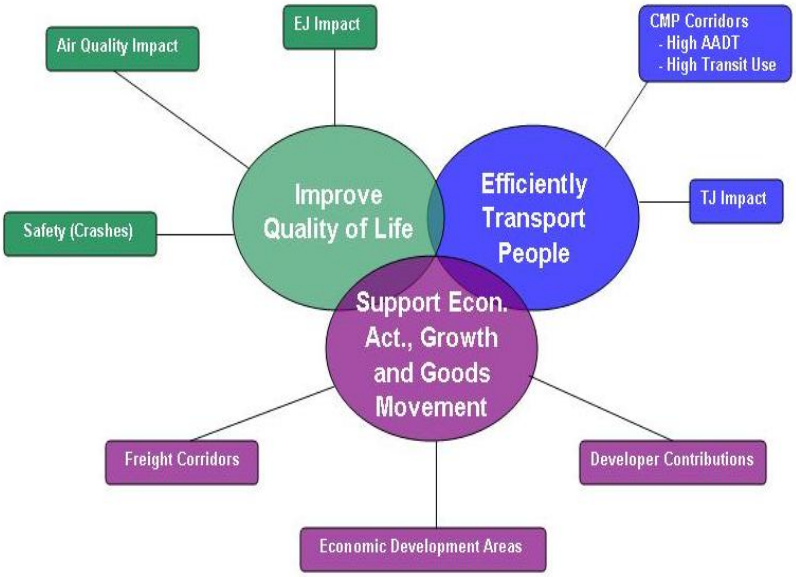
A key component in WILMAPCO's "top-down" approach ensures that solutions which would eliminate or shift auto trips or improve roadway operations are evaluated before adding roadway capacity.

The WILMAPCO CMS and the Project Prioritization Process

Spurred by a plethora of unfunded transportation projects in our 2030 Regional Transportation Plan (RTP) and the desire for more transparency in project selection, WILMAPCO developed a technical process to score, and ultimately help rank projects for funding. Known as the "Project Prioritization Process," transportation projects are scored against criteria tied to the overall goals of our RTP: Improve Quality of Life; Transport People and Goods; and Support Economic Growth and Activity.

As shown in the image below, measures such as a project's impact on air quality, sensitive neighborhoods (Environmental and Transportation Justice), or location along a freight route are considered. Projects receive points if they support these criteria, or can have points deducted if they do not. For example, a major commuter rail project would receive the maximum of three possible points for air quality, as it would promise to reduce automobile emissions. By contrast, an interstate interchange project located in a low-income/minority neighborhood would receive the maximum of three negative points for Environmental Justice, as it would introduce noise, pollution and traffic into the community.

WILMAPCO Project Prioritization Process & Criteria



A project's presence within an identified CMS corridor can boost its score greatly. Projects within a CMS corridor automatically receive two points. They are then qualified to receive up to four points if the traffic volumes are high and up to three points if the capacity of the location's fixed-route transit service is too. With nine points out of a possible 33, CMS is the single most heavily-weighted factor in the prioritization process.

After technical scores are calculated, qualitative considerations may be introduced to adjust a project's final ranking. These include the urgency of the project, or its cost-effectiveness. For a more detailed overview of the WILMAPCO Prioritization Process with full point breakdowns, please visit: www.wilmapco.org/RTP.

Putting the scoring system into practice, the table below lists the technical scores of projects in the FY2009-2012 Transportation Improvement Program (TIP) which fell within a CMS corridor. The TIP is a four-year funding program with over $1.2 billion in transportation projects. Below is a breakdown of the congestion-based scoring criteria used in the adopted WILMAPCO prioritization process.

Top FY 2009-12 TIP Projects Based on CMS Criteria from the WILMAPCO Prioritization Process

	Project	Project Type	CMS Proximity Score	CMS AADT Score	CMS Transit Score	Total Score	CMAQ Eligible?
1	I-95 & SR 141 Interchange	Expressways	2	4	3	9	
2	I-95 & SR 1 Interchange	Expressways	2	4	3	9	
3	Rail: Newark to Wilmington Track Expansion	Transit	2	4	3	9	Yes
4	I-95 / US202 Interchange	Expressways	1	4	3	8	Yes
5	SR 1, Tybouts Corner to SR 273, Widening to 6 lanes	Expressways	1	4	3	8	
6	SR 2: S. Union Street	Arterial	2	2	3	7	
7	Aeronautics, New Castle County Airport Terminal Improvements	Other	1	4	2	7	
8	Churchmans: BR 234 Pedestrian Improvements	Bike Ped	2	2	3	7	Yes
9	Transit Vehicle Replacement and Refurbishment, New Castle County	Transit	2	2	3	7	Yes
10	SR 141 & US 13 to Burnside Blvd. Widening	Arterial	1	4	1	6	
11	Transit Vehicle Expansion: Bus Route 301	Transit	1	2	3	6	Yes
12	SR 7/US 40: SR 7, Newtown Rd. to SR 273	Arterial	2	2	1	5	
13	Churchmans: SR4/Harmony Rd.	Arterial	1	2	2	5	Yes
14	SR 4, Christina Parkway: SR 2, Elkton Rd. to SR896, S. College Ave	Arterial	2	2	1	5	
15	US 40: Eden Square Connector	Arterial	1	2	2	5	
16	Wilmington Traffic Calming: Walnut: MLK Blvd. to 16th	Collector	2	2	1	5	
17	I-95: Carr Road/Marsh Rd. Interchange	Expressways	2	3	0	5	
18	Bicycle, Pedestrian: Pomeroy	Bike Ped	2	2	1	5	Yes
19	Transit Vehicle Expansion: Middletown/Glasgow/Newark	Transit	2	2	1	5	Yes
20	Transit Vehicle Expansion: 301 MIS	Transit	2	2	1	5	Yes
21	US 40: Transit improvements	Transit	1	2	2	5	Yes
22	Rail Improvements: Fairplay Station Parking	Transit	2	0	3	5	
23	SR 2, Elkton Rd., Casho Mill Rd. to Delaware Ave.	Arterial	2	2	0	4	
24	SR 2, Elkton Rd., Maryland State Line to Casho Mill Rd.	Arterial	2	2	0	4	
25	Wilmington Riverfront: Christina River Bridge	Collector	1	0	3	4	
26	US 301: MD Line - SR 1, and Spur	Expressways	2	2	0	4	
27	Transit Vehicle Expansion, NCC	Transit	1	2	1	4	Yes

Section #3: System Monitoring

The fourth and final step in the development of the CMS, the task of monitoring the system, tracks the effectiveness of the CMS recommendations over time and allows us to see where new problems might arise. This section displays series of data analyses designed to help decision makers get a sense of the changing conditions of our region and their impact on our network. Analysis in this section includes:

- Programmed Projects along identified CMS corridors
- Crash Analysis & Trends
- Crash Analysis– Roadway Segments
- Crash Analysis—Intersections
- Impact of Freight on the CMS Network
- Mean Peak Travel Speed Changes
- Traffic Volume Changes

Section #4; Congestion Mitigation Activities

The following section is designed to chronicle the effectiveness of some of the congestion mitigation strategies discussed in the strategy evaluation section of this document. This is now possible as a result of the numerous data collection efforts performed by WILMAPCO and its member agencies. With a well established base of annual data, the ability to see trends that have developed. The analysis in this section gives some insight on the linkage between where certain congestion mitigation measures are more effective than others.

- Transit Performance
- Non-Motorized Facilities
- Intelligent Transportation Systems (ITS)
- Park & Ride / Park & Pool Lot Inventory
- Transportation Management Activities

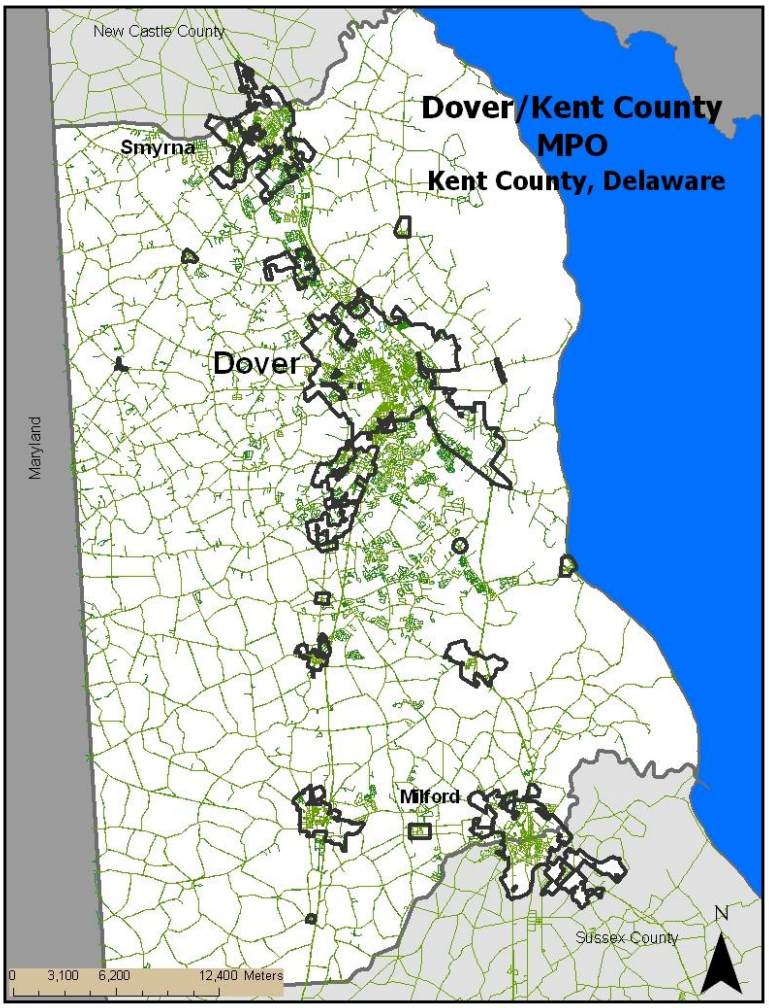
WILMAPCO CMS Subcommittee

The CMS is developed by the WILMAPCO Congestion Management Subcommittee and assembled by WILMAPCO staff. WILMAPCO staff coordinates with all agencies of the subcommittee for various activities regarding the report such as data collection, review of performance measures and review of potential congestion mitigation strategies. Currently the subcommittee consists of members from DelDOT, Maryland State Highway Administration (MDSHA), Delaware Transit Corporation (DTC), New Castle County Land Use Department, City of Wilmington, TMA Delaware, Maryland Department of Planning, Delaware Office of State Planning Coordination and a member of the WILMAPCO Public Advisory Committee.

For more information regarding the CMS or to download the latest version, visit http://www.wilmapco.org/cms

Source: Daniel Blevins
Principal Planner
WILMAPCO
Phone: (302) 737-6205 Ext 21
Email: dblevins@wilmapco.org

Dover/Kent County MPO Congestion Management



CMS is not required for MPO's with urban area populations of less than 200,000 persons. The MPO's CMS is managed by the Delaware Department of Transportation (DelDOT) to collect and analyze the data and identify congested intersections and segments. The MPO does, however, define a congested intersection as having an overall level of service (LOS) of F.

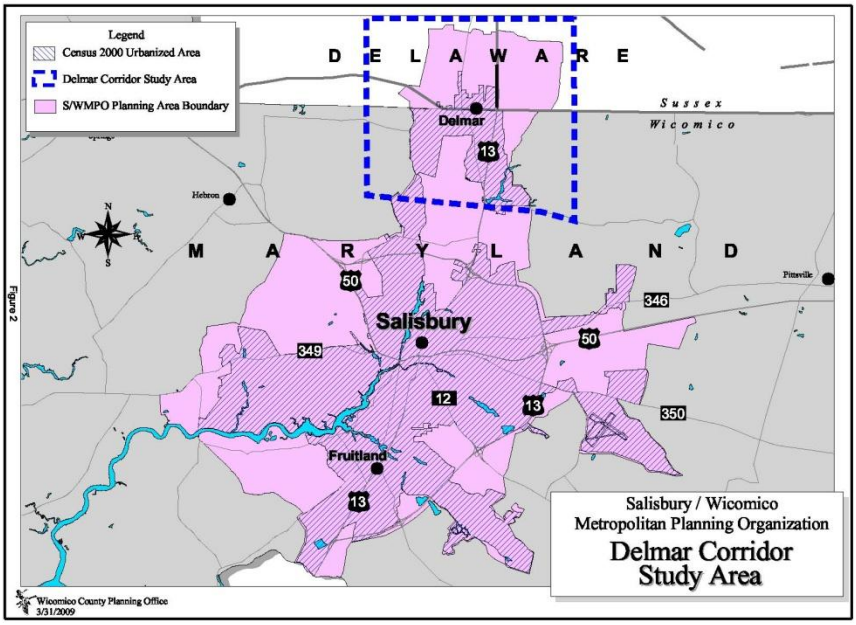
Congestion Management Projects

There are two intersections that are identified as congested intersections: Division Street (DE 8) at US 13 and Loockerman Street at US 13. The DE 8 at US 13 is included in the 2009-2014 Comprehensive Transportation Program (CTP) as a Highway Safety Improvement Program (HSIP) project. Two other projects that may be considered as addressing congestion management are the grade separated intersections on SR 1 at Little Heaven and at Thompsonville Road. The projects, while being implemented to provide safe intersections, remove the two remaining traffic lights on SR 1 north of Milford.

To date, the CMS has not been a factor in the MPO's priority process. The MPO continues to work with DelDOT to monitor the situation to determine if there are periodic changes that are to be reconciled. We continue to cooperate to identify performance measures that should be incorporated into the scoring system that determines priorities and that may be used as an indicator performance measure.

Source: James J. Galvin, Jr. AICP
Principal Planner
Dover/Kent County MPO
Phone: (302) 387-6028
james.galvin@doverkentmpo.org

Salisbury/Wicomico Metropolitan Planning Organization (including Delmar, DE)



As a result of the 2000 Census, the urbanized area of Salisbury, Maryland reached the 50,000-population threshold that requires establishment of an MPO. This new Salisbury/Wicomico MPO (S/W MPO) includes Delmar, DE, and a portion of Sussex County that is adjacent to the Town. It is expected that other areas of Sussex County will meet the 50,000-population threshold after the next census in 2010.

A Congestion Management System or Process is not required for MPOs with a population less than 200,000, and when initially established, the S/W MPO had a population of approximately 60,000. However, the MPO has undertaken detailed transportation corridor studies for areas that are experiencing significant development pressures and increased congestion. Five transportation corridors have been identified as requiring further study.

In FY 2007, the "U.S. Route 13 North/Bi-State Boulevard Corridor" was identified as one of the five congested corridors. This corridor, shown on the attached map, includes portions of Delmar, MD and Delmar, DE, and adjacent areas of Sussex County. The study will analyze existing traffic and roadways, and based on development trends and anticipated development, projected Levels of Service for the years 2010, 2020 and 2030. The study is underway, with completion expected prior to July 1, 2009.

Once completed, the results of the study will be provided to the Maryland Department of Transportation, the Delaware Department of Transportation, and the Town of Delmar. Each of these jurisdictions has affected roads within the study area. The study will recommend road improvements, where necessary, to ensure that congestion levels are at an acceptable level. The jurisdictions can use these recommendations to program future improvements, subject to funding availability.

Source: Gary R. Pusey
Long Range/Transportation Planner
Ph: (410) 548-4860
P.O. Box 870
Salisbury, MD 21803
gpusey@wicomicocounty.org

Delaware MPOs

Delaware is a small state with only 3 MPOs. DelDOT coordinates with these agencies on congestion management, related funding needs, and other transportation issues.

The contact person in charge of coordinating with MPO's and congestion mitigation in DelDOT is:

Mark Eastburn
Planner, DelDOT
DelDOT Statewide & Regional Planning
(302)760-2138
Mark.Eastburn@state.de.us

Recommendations for Congestion Management

Electronic billboards should be installed at major parking centers to advise the availability of parking for motorists. The use of smart technology can help in such effort.

Shopping centers and casinos should increase bus service for visitors from other states. This will not only reduce congestion, but increase revenues as well.

A public-private partnership may be needed to provide more ferry service across the Delaware River to and from New Jersey to relieve traffic congestion on the Delaware Memorial Bridge and I-95. Also, the addition of public-private partnership to transit services may be desirable for relieving congestion in urban areas.

Air Quality Program

Pursuant to Section 176 (c) of the Clean Air Act Amendments of 1990 and the Transportation Conformity Rule as enacted by SAFETEA-LU, all federally mandated state air quality analyses of transportation related emissions will use HPMS derived assignments of roadway mileage. This federal requirement manages to standardize the measurement of VMT by state nationwide making transportation related emission measurements equitable from one state to another. The State of Delaware makes use of HPMS based roadway data when analyzing conformity to the State Air Quality Implementation Plan (SIP) for updates or amendments to Transportation Improvement Programs (TIPs) and Regional Transportation Plans (RTPs). Delaware based HPMS data are also employed in developing the SIP itself. During calendar year 2008, the Delaware Department of Transportation conducted three conformity determinations on TIP and RTP amendments for the New Castle County MPO by providing roadway mileage data, speeds and seasonal adjustment factors as input to the 2008 and 2009 Ozone Rate of Progress and Attainment SIPs from the HPMS database.

Mark Glaze, Air Quality Program Manager
Delaware Department of Transportation
(302) 760-2529
mark.glaze@state.de.us

ON THE HPMS DATA COMPILATION

Delaware is a small state consisting of 1954 square miles, which ranks 49th in the land area and 45th in population, estimated at 875,953 persons in 2008.

The entire data, as being submitted, were collected, compiled, and presented in the U.S. Customary Units. There is no plan in DelDOT to convert to metric system in the foreseeable future.

There are only two full time staff members in the department to gather road inventory and field data. During 2008, the suburban and municipal street mileages were increased by 20.57 and 11.58 miles respectively. Although these streets are ineligible for federal-aid apportionment, the revised inventory was essential for an increase in the authorization of suburban and municipal street-aid funds of the state. The Suburban and Municipal Street data are coded and traffic volumes estimated on engineering judgments.

The traffic count is contracted to Chaparral, a traffic monitoring consultant in New Mexico. Accordingly, the traffic counting schedule is prepared one year in advance.

Stormy weather mixed with heavy rains creates coastal flooding and traffic diversions and detours take high priority. As a result, some ATR stations periodically malfunction.

There is no HPMS field crew in Delaware, and therefore, some data are not made available until just before the due date for reporting the HPMS data. DelDOT also encounters problems in "Sample Management". There are small sections within the Volume Group Universe with section lengths under 0.20 miles. These sections should be ignored by the HPMS software. DelDOT puts a lot of effort into collecting data from numerous small sections to avoid errors. Because the software fails to ignore very small sections, it is doubtful if these extra efforts are worthwhile. After the compilation of HPMS data, a field review is made before those data are made final**.**

Some small sections in the Central Business District and around the beach area are deleted. In the past, these samples generated the error, "Unusually High Number of Intersections (> 25 per mile)".

PSR values for some of the HPMS sample sections with pavement improvement in 2008 were modified and adjusted using engineering judgment.

We have not attempted to override the HPMS software capacity. The HPMS universe requirements are only for through lanes. In reality, some HPMS sections function as through lanes while providing local access.

NAAQS Non-attainment Areas

The following is a list of NAAQS non-attainment areas in the State. The list also shows urbanized areas within each NAAQS non-attainment area.

All three counties are declared as NAAQS non-attainment areas.

County	Urbanized Area
1. Kent County (Nonattainment)	Dover
2. New Castle County (Nonattainment)	Philadelphia
3. Sussex County (Nonattainment)	Salisbury

List of Standard Sample Panel Groupings:

- Not applicable in Delaware

The statistical information was derived from various computer files, such as the 2008 HPMS Universe/Sample database, the Delaware Road Inventory, and the traffic data files.

TRUTH- IN- DATA

During 2008, there were 77 ATR stations, 5 toll sites for collecting traffic data, and 623 sites using portable recorders in the highway network**.**

Other than ATR 8003 in the I-95 corridor, all ATR reported data for more than 200 days and were deemed reliable. The I-95 (ATR 8003 (WIM)) site remained non-operational.
A decision was made to reposition this ATR further north in the recently widened the I-95 corridor in an effort to reduce the impact of slow traffic in peak demand (> 30th Hour). The installation of this ATR is expected in early 4th quarter CY 2009 upon rehabilitation of the roadway segment in which it is to be installed. Traffic pattern data for this site was derived from data analysis across adjoining segment and regional ATR's

Some of the sensor failures are indicated below:

Site	2008 Days Lost	Problem	Cause of Problem
8003	366	Sensor Failure	ROAD Widening - Relocate
8017	344		Construction
8079	121		Construction
8031	108	HARDWARE	Accident damaged ATR
8080	12	Repair	Loop leads crossed 03/08
8081	12	Repair	Loop leads crossed 03/08

The sum of all other ATR off-line days represents less than 8% of the year. DelDOT continuously monitors data for efficacy, completeness, and expectations of travel patterns throughout the State. Missing or non-auto-polled data is quickly retrievable via direct dial-up.

DelDOT is planning to upgrade 6 critical volume only ATR locations to WIM sites.

A new roadside Weigh Station on US301 @ MD line is expected on-line June 2009.

DelDOT TMC operators and technicians continuously monitor ATR connectivity and are capable of dispatching timely repairs before large volumes of data are lost.

Immigrants in Poultry Industry

Delaware is also known as The First State, The Diamond State, Blue Hen State, and Small Wonder.

The state bird is Blue Hen. Delaware was ranked 8th among the states in poultry production at 1,597,700,000 pounds in 2007. Also, Delaware produced 245,800,000 broilers in 2007, and ranked 10th among all states in the number of broilers produced. In 2006, the broiler production in Delaware was valued at $739,230,000. According to the 2002 U.S. Census of Agriculture, Sussex County in Delaware ranked first among America's counties in broiler chicken production. (Source: Delmarva Poultry Industry, Inc.)

Most of the new immigrant workers in Delaware poultry industry are Hispanic, low wage earners who do not have the right to vote in this country. When the consumers order "Dollar

Menu Meal" at some fast food restaurants, they seldom think about the low wage workers who make significant contribution in the preparation of this thrifty meal for them.

Nearly all of the poultry farms are located on local roads, which are not on the Federal – Aid system. Most of the poultry farm workers live in small municipalities with population below 1000 near poultry farms. The average salary of poultry farm workers is very close to the minimum required by law. In fact, the elected officials are hard-pressed to allocate state revenues to assist such people of low income.

In order to assimilate the Non- English speaking folks, the Delaware State Board of Education offers a special program, called **English Language Learners (ELL).** The enrollment in this program amounted to 5.5% of the total Delaware School enrollment in 2008.

The new change in immigration laws will not only affect Delaware's economy, but it will also require a greater financial commitment toward educational, health and other social benefits to the immigrants.

HPMS Reassessment 2010+ and DelDOT

There was some discussion to add new data items and new data model based on GIS. These and an overview of these changes are contained in the draft manual seeking comments from the HPMS staff.

With the increased need for accurate HPMS data, there may be some difficulties in meeting the requirements by DelDOT. Small states like Delaware lack adequate resources for data collection, analysis, and compilation. The existing manpower of the Planning unit of DelDOT is inadequate to inspect 615 intersections on an annual basis in Delaware. DelDOT retains consultants for the collection of pavement data including PSR and IRI. DelDOT also retains another consultant for traffic count and compilation of traffic data. Moreover, there is no field crew in DelDOT Planning to verify some of the HPMS data. 2010 Reassessment requirements, more resources are needed to comply with the additional data requirements.

Resources are needed for DelDOT, but the state is facing a budget deficit. The proposed user fees for the state Transportation Trust Fund do not include motor fuel taxes. According to www.taxfoundation.org, the local, state and Federal gas taxes amount to a total of 45.9 cents per gallon of gasoline on an average. These taxes have remained unchanged for more than a decade although the price of gasoline has increased significantly during the same period. The recent fluctuation in the price of gasoline was substantially higher than the total amount of taxes for gasoline.

HPMS Statistical Data

The HPMS data supports many types of analyses that are used by various administrative staff, and are reviewed by elected officials. Besides the Federal Submission, the HPMS data is widely used by State, County, Municipal and other local agencies in Delaware. Roadway

Mileage, DVMT, and similar data are used by DNREC and the MPO's for various tasks. Most of the data are available at DelDOT HPMS web site. The HPMS data are available through DelDOT, which is the only official source of information.

The HPMS provides statistical tables with useful information for agency staff conducting transportation-related analyses. It also provides data to the general public, data for decision-making, and a quick reference of facts. In addition to the HPMS data, the following link also provides information on other DelDOT Projects.

Presently, we are working on the "Delaware Highway Statistics Booklet" which will contain historical data for the years 2001-2008, and will be updated annually. For those who need to perform micro-analysis, the HPMS database is available from the HPMS coordinator.

Subhash Bhai
HPMS Coordinator
System Performance Monitoring
DelDOT Planning
(302) 760-2148
Subhash.Bhai@state.de.us

Personal Remarks

The Fiscal Year ends on June 30th here in DelDOT, but the HPMS database is managed on the Calendar Year basis. The HPMS items, such as the Year of Surface Improvement, refer to the Calendar Year, whereas the available information pertains to the Fiscal Year. Thus it has been a challenge to sort out the data appropriately for HPMS. In order to overcome this difficulty, we are working with our Office of Technology to make the data available at the end of each month.

For DelDOT, the process of data compilation is a true team effort, because unlike other states, DelDOT does not have a separate office of statistics and field crew to conduct HPMS sample inspections. The data is collected from various sections of DelDOT. Suggestions provided by teammates are included in this report. This is truly a team effort by the HPMS hard hats and I would like to express my gratitude to all those who gave me the support to complete the HPMS report. Undoubtedly, the success of this HPMS report is a direct result of efforts made by these individuals.

I would like to extend my sincere appreciation to Arhin Kwame, FHWA, DelMar Division Office, who has graciously assisted us in the preparation of the 2008 HPMS. Special thanks are due to Mr. Thomas Roff, and Mr. Robert Rozycki at FHWA, Washington Headquarters, for their patience and constant guidance in completing this arduous task.

Today, Monday, June 8, 2009, the submission of 2008 HPMS final report is quite a relief.

Hopefully, during these times of bailout, the 2009 stimulus package will come as a blessing for the highway projects

Sincerely,

S. Bhai
Senior Transportation Planner

sb
Enclosure(s)
cc: Hassan Raza, Division Administrator, FHWA
Arhin Kwame, FHWA, DelMar Division Office
Ralph Reeb, Director of Planning, DelDOT
Tyrone Crittenden, Program Manager, DelDOT